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ABSTRACT

The purpose of this legislation is to establish the authority and provide the operational machinery needed for the effective and efficient management of Automatic Data Processing (ADP) equipment. Following the statement of the purposes of the bill, this report contains: a summary, discussion, the committee amendments, a section by section analysis, and agency reports on the bill. (The 1971 Hearing of the Committee on Government Operations on Automatic Data Processing is available as LI 003 854.) (NH)

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House Report No. 802

AUTOMATIC DATA PROCESSING EQUIPMENT

REPORT

OF THE

COMMITTEE ON GOVERNMENT OPERATIONS

ON

H.R. 4845 Legislative History Public Law 89-306

A BILL TO AMEND TITLE I OF THE FEDERAL PROPERTY AND ADMINISTRATIVE SERVICES ACT OF 1949 TO PROVIDE FOR THE ECONOMIC AND EFFICIENT PURCHASE, LEASE, MAINTENANCE, OPERATION, AND UTILIZATION OF AUTOMATIC DATA PROCESSING EQUIPMENT BY FEDERAL DEPARTMENTS AND AGENCIES

AUGUST 17, 1965.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

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U.S. GOVERNMENT PRINTING OFFICE
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89TH CONGRESS, 1st Session } HOUSE OF REPRESENTATIVES { REPORT No. 802

AUTOMATIC DATA PROCESSING EQUIPMENT

AUGUST 17, 1965.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. BROOKS, from the Committee on Government Operations, submitted the following

REPORT

[To accompany H.R. 4845]

The Committee on Government Operations, to whom was referred the bill (H.R. 4845) to provide for the economic and efficient purchase, lease, maintenance, operation, and utilization of automatic data processing equipment by Federal departments and agencies, having considered the same, report favorably thereon with amendments and recommend that the bill as amended do pass. The amendments are as follows:

1. Page 2, line 1, delete ", or at the expense of,".
2. Page 2, line 12, delete "require" and insert in lieu thereof "provide for".
3. Page 3, line 15, following the word "of", insert "equipment inventory, utilization, and acquisitions, together with an account of".
4. Page 5, line 22, delete the following: "and other users".
5. Page 5, line 23, delete "requirements." and insert in lieu thereof "requirements, including the development of specifications for and the selection of the types and configurations of equipment needed.".
6. Page 6, line 1, delete the following: "or user".

I. PURPOSES OF THE BILL

> The findings on the impact of ADP previously reported herein indicate that dynamic leadership of the ADP program of the Federal Government is a vital necessity. Passive, partial, or informal types of leadership have had their place, but have now outworn their usefulness.[1]—*1959 Bureau of the Budget Automatic Data Processing Responsibilities Study.*

After 6 years, the type of leadership the Bureau of the Budget (BOB) recommended in this early automatic data processing (ADP) management study has yet to be realized. This legislation would establish the authority and provide the operational machinery needed for the effective and efficient management of this costly equipment.

During the years following issuance of the BOB's 1959 ADP study, the Comptroller General has issued approximately 100 audit reports severely critical of Government ADP management. Over the years, he has continuously emphasized and demonstrated the need for Government-wide coordination in ADP management. Federal ADP expenditures now exceed $3 billion annually and the Comptroller General conservatively estimates with regard to the equipment coming within this management program that approximately $200 million a year can be saved through the use of long recognized and accepted management techniques provided in this legislation.

This committee recommended similar legislation to the House on June 19, 1963 (H. Rept. 428, 88th Cong., 1st sess.), and that legislation, as amended (H.R. 5171), was approved July 18, 1963.

II. SUMMARY

The Federal Government is the largest user of ADP in the world with annual expenditures exceeding $3 billion or approximately 3 percent of the Federal budget. There are now an estimated 2,000 computer systems in use in the Federal Government.

What is ADP?

Automatic data processing (ADP) is the concept whereby a machine or computer can accept information or "input data," process the data according to a predetermined "program," and provide the results in a usable form.

Data processing computers are either analog, which measure "how much," or digital, which calculate numbers or compare nonnumerical data encoded in digital form. Most ADP in use is digital in design, and it is this type of equipment that is the principal concern of the legislation.

The heart of an ADP system is the processor or "main frame" which contains the complex electronic circuits which accept and process data. The processor in conjunction with input, output, and storage components such as a tape unit, a card punch, a memory component, a printer, and so forth, make up a computer system. The system is "designed" or "configured" by combining various of these mass produced components, the combination depending on the particular needs

[1] "Report of Findings and Recommendations Resulting From the Automatic Data Processing (ADP) Responsibilities Study, September 1958–June 1959." Bureau of the Budget, p. 20. Reprinted in hearings on H.R. 4845, 89th Cong., 1st sess., p. 590.

of the user. Most components are general purpose in design and the system can be programed to perform various functions. About 90 percent of the computers in Government are general purpose. In addition to the "hardware," the user must also obtain the instructions and procedures needed to operate the system. These are called "software" and often constitute a substantial portion of the cost of an ADP system.

The technological evolution of ADP has entered the third generation. The first generation equipment contained electronic vacuum tubes while the second generation equipment introduced solid state transistors. The third generation will integrate ADP with communications systems whereby central computers of high capacity will supply the needs of many users. Overall equipment costs will be substantially higher but unit processing costs to the individual user will be markedly reduced. As third generation time-sharing increases, the traditional agency-by-agency structure of the Government in terms of ADP management will become less apparent and less important and the costs of any deficiencies in Government ADP management will reach staggering proportions.

Current Government ADP management techniques

In the 1950's, existing management policies applicable to calculators, punched card, and other office equipment were extended to ADP. Bureau of the Budget (BOB) concern over ADP management was usually limited to the annual agencywide budget review processes. In 1958, however, BOB began a comprehensive Government "ADP Responsibilities Study" concluding that "dynamic leadership" in Government ADP management was a "vital necessity." The study recognized the need for specialized management of ADP, for Government-wide coordination, and for accurate up-to-date information for all levels of management. A subsequent BOB study in 1965 recognized many of these same deficiencies.

Despite recognition of this need for a change in the concept of ADP management as reflected in the 1959 BOB study, overall Government management was limited to the issuance of advisory "guidelines" to the various agencies by BOB. Guidelines and bulletins have been issued on ADP feasibility studies, lease versus purchase evaluations, inventory reports, and sharing programs.

Since 1959, the General Accounting Office (GAO) has issued about 100 audit reports revealing serious shortcomings in the acquisition and use of ADP in various departments and agencies as well as ADP acquired under cost reimbursable contracts at the expense of the Government. Most of the deficiencies constituted violations of BOB guidelines.

The need for Government-wide coordination in ADP management

Coordination is fundamental to good management, as has been proved in Government and business numerous times. The Secretary of Defense has applied this concept to a number of functions of DOD achieving significant improvements.

On four occasions, in 1958, 1960, 1963, and 1964, the GAO has submitted comprehensive ADP management studies to Congress illustrating the improvements that can be made through Government-wide coordination in ADP management. The studies, backed up by the specific findings of mismanagement as illustrated in almost 100 other

audit reports, support the proposition as embodied in H.R. 4845 that certain aspects of Government ADP management be coordinated on a Government-wide basis. Through this approach, the Comptroller General conservatively estimates with regard to the ADP equipment that would come within this management program that savings of between $100 million and $200 million annually will be realized—without compromise in user agency selection or use of equipment.

Effective Government-wide management of ADP provided by H.R. 4845

H.R. 4845 delineates the responsibilities of BOB, GSA, and the Department of Commerce and provides a stronger organization plan for Government ADP management. The bill maintains BOB's traditional control over fiscal and policy matters. Action by any agency under this legislation would be subject to either approval or review by BOB.

GSA, in line with its traditional authority, is delegated operational responsibilities for coordinating Government ADP under H.R. 4845. GSA would administer an ADP "revolving fund" which should provide (1) more adequate management information, (2) optimum utilization, and (3) economic acquisition of Government ADP.

The National Bureau of Standards would offer technical support to the management program and will work toward ADP compatibility. The authority in this legislation would supplement the Government research effort in coordination with other Federal agencies.

H.R. 4845 would provide a continuous flow of recurring data needed for effective and efficient management

Presently BOB issues only an annual inventory report wholly inadequate for ADP management purposes. Inventory and fiscal information is needed to maintain policy and budgetary control, increase utilization, and provide more economical acquisition of equipment. Under this legislation, GSA would establish such a comprehensive inventory. This inventory coupled with the fiscal information flowing from the operations of the "revolving fund" would afford all levels of Government with more adequate information necessary for effective and efficient management. The availability of information on prospective Government requirements should also provide for fairer competition among all ADP manufacturers.

Optimum utilization of Government ADP

There is widespread waste in available but unused Government ADP equipment time. On June 16, 1964, BOB set up an ADP sharing program under GSA. This legislation would, however, substantially improve the effectiveness and efficiency of GSA's interagency coordinating efforts. GSA would also be authorized to establish multiagency service centers to furnish ADP capacity to several users.

More economic acquisition of ADP

This legislation would strengthen the Government's bargaining position in acquiring ADP. The Government now obtains no special advantages as a volume purchaser. Under the GSA supply schedules, price determinations and procurement are divorced. To obtain volume discounts, the Government must have volume procurement rather than a piecemeal agency-by-agency procurement.

The traditionally accepted solution to this type of problem has been the "single purchaser" concept. The Government would be in a

stronger bargaining position were all its ADP purchase and lease money in "one pocket." Whenever feasible, general purpose components, including those used in specially designed ADP systems, would be acquired under a volume procurement program. Government software acquisition could also be subjected to more orderly procurement procedures.

The revolving fund would be used to consolidate volume acquisitions. GSA would acquire the ADP systems selected by the management of the agencies and, in effect, the agencies would then lease equipment from the GSA revolving fund reimbursing the fund periodically at rates reflecting the use value of the equipment. GSA could obtain direct appropriations covering overhead expenses incident to operating the revolving fund.

Useful life to the Government as a whole

In addition to volume procurement, Government-wide coordination would provide an effective means for making "lease versus purchase" evaluations on the basis of the benefit to the Government as a whole. Lease versus purchase evaluations should be made from the standpoint of the estimated useful life of the equipment to the Government as a whole rather than the estimated period of application of the initial user agency. At this time, lease payments generally equal the cost of ownership within 2½ to 4½ years although the useful life of most ADP equipment is estimated at between 5 and 10 years. The Government has countless needs for ADP and the GAO logically suggests that the estimated period of application by the initial acquiring agency may not constitute a realistic estimate of the economic useful life to the Government as a whole. It is not unrealistic that officials cognizant of Government inventories and needs could not, on a sound, businesslike basis, attribute secondary usage potential to selected systems which have long-range utilization within the Government. Too often, at present, the Government in a period of from 2 to 5 years pays rentals approximating or even exceeding the purchase price—but ends up not owning the equipment which might have considerable economic life in it. And, assuming that some further utilization did not develop, the Government could get the benefit of some return on investment through the sale of the equipment as surplus property.

The revolving fund would have other advantages. As an example, those systems with the highest comparative purchase advantage for the Government as a whole could be purchased while systems offering less purchase advantage could be leased. There may not always be sufficient capital for the Government to purchase all its ADP which should be purchased. Budgetary considerations and funding problems in the agencies should not interfere with the purchase on a priority basis of that equipment having the greatest purchase advantage.

Exemptions for national security and defense

H.R. 4845 is aimed at general purpose commercially available ADP systems and components. Specially designed components forming a part of tactical weapons or space systems which have no general purpose applicability are not involved in this program. However, general purpose commercially available ADP components used in conjunction with specially designed components and as parts of systems with unique scientific, cryptologic, or military applications would come within provisions of this legislation for acquisition, inventory

control, and potential secondary usage although such components or systems might not be available for sharing.

The Administrator of GSA is authorized to exempt individual systems from provisions of this program to avoid compromise of our national security or defense and to assure economy and efficiency. As this entire management program would be under the policy control of the BOB and the express direction of the President, it is not necessary or advisable to authorize discretionary authority in agency heads to exempt equipment from the program. The Administrator is further authorized to delegate authority extended him under this legislation to the extent he considers necessary and desirable for the orderly implementation of the program.

Conclusion

This legislation is essential to effective Government ADP management. Based upon two comprehensive BOB ADP management studies, about 100 General Accounting Office audit reports, and 3 years of active investigation by this committee, the time has come for Congress to take reasonable but effective action to assure the establishment of efficient ADP management in Government.

III. DISCUSSION

The Federal Government is the largest user of automatic data processing in the world. Annual Federal ADP expenditures exceed $3 billion, or approximately 3 percent of the Federal budget. The taxpayers' present investment in ADP is unknown. But, at this time, ADP usage in the Government is doubling about every 3 years and is expected to increase indefinitely.

The first all-electronic computer was constructed during World War II and delivered to the Army Ordnance Corps in 1945. UNIVAC I, the first computer with general data processing capability, was installed at the Bureau of the Census in 1951. In 1954, there were 10 computer systems in operation within the Federal Government. By 1962, the number had increased to 1,000. There are now at least 2,000.[2] And, these figures do not include an estimated 1,000 to 2,000 systems contractors have either leased or purchased at the Government's expense. Nor do these totals include computer components forming a part of tactical weapons and defense systems or operational elements in missile and space vehicles which are not included under this management program.

A. What Is ADP?

Automatic data processing is the concept whereby a machine or computer can accept information or "input data," process the data according to a predetermined "program," and provide the results in a usable form. In an automatic data processing system, the electronic computer is the heart or focal point of the system. An ADP system consists of a number of components including input, processing, storage, and output devices. Data processing computers are either analog or digital in design.

[2] 1964 Inventory of Automatic Data Processing Equipment in the Federal Government, Bureau of the Budget, July 1964.

ANALOG COMPUTERS

Analog computers measure "how much." Analog computers use electric current coupled at times with mechanical devices to simulate the variable factors of some action, circumstance, or phenomenon which cannot be effectively measured or evaluated directly, or the factors of some hypothetical problem or mathematical equation. The analog computer correlates the relationship between these factors and furnishes a measure or magnitude (how much) of whatever resultant the computer operator seeks to obtain. In the past, analog computers have been principally used in scientific work and make up only a small percentage of the computers now in use.[3]

DIGITAL COMPUTERS

Most computers are digital in design. Digital computers calculate, compare, and process information. They are essentially electronic, arithmetical, calculating machines with the additional capacity to compare, arrange, sort, store, and identify data. Digital computers can be used in any area of human endeavor where computations are required or information of any kind has to be processed or simulated. The basic concept of the digital computer has long been recognized and is relatively easy to understand, but the electronic circuitry and the manufacturing techniques implementing these concepts are new and exceedingly complex.

BINARY NUMBERS SYSTEM

Digital computers generally use the binary (base 2) numbers system rather than the decimal (base 10) system we normally consider as the only natural approach to arithmetic. Theoretically, a digital computer might be designed to any numbers base. However, the binary system is easiest. Only combinations of two symbols, "0" and "1", are needed to express any number—no matter how large. Under the decimal numbers system, 10 different symbols are used to represent the series of magnitudes from zero to nine. Then for magnitudes of 10 and above, these same unique number symbols are simply repositioned. The binary system follows the same approach except that the reuse of symbols begins with "2" rather than "10", as follows:

Decimal:	*Binary*
0	0
1	1
2	10
3	11
4	100
5	101
6	110
7	111
8	1000
9	1001
10	1010
11	1011

[3] "The 'Assault' on Fortress IBM," Fortune, vol. LXIX, No. 6 (June 1964), p. 207: "There is the analog-computer industry, whose 1963 volume was around $45 million and whose sales are growing at better than 15 percent a year. The analog unlike the digital computer does not count sequentially and has no memory, but it compares many quantities simultaneously, and so provides a swift way of looking at a complex system all at once, in 'real time.' It is indispensable in such jobs as military fire control, and is much used in simulation. The IBM of the analog-computer industry is Electronics Associates of Long Branch, N.J., which last year earned about $2,200,000 on $29 million sales. Some others in the field are Beckman Instruments, Veeder-Root, and Westinghouse."

The advantage of the binary system is also that the "0" and the "1" tie in neatly with the mechanical and electronic concepts around which the computer and its satellite components are designed.

ADP SYSTEM MADE UP OF COMPONENTS

Various components make up an ADP system. The principal component of the digital computer is the processor or "main frame." The processor contains complex electronic circuits which can accept and process digital information. In simplest terms, each of these electric circuits contains a switch. The switch may be closed or open, and depending on the position, electric current flows or does not flow through the circuit. The position of the switch and the flow of current correspond to the "0" and the "1" of the binary numbers system.

The processor or main frame accepts "input" information usually fed into it from punched cards or magnetic tape components. On the punched cards at predetermined locations there is either a hole through which an electric contact can be made, or there is the absence of a hole so no electric contact can be made. Similarly, on magnetic tape there is either a magnetized spot or the absence of such a spot. On both the card and the tape, the presence or absence of a hole or magnetized spot corresponds to the binary numbers system symbols, "0" and "1," and, therefore, the open or closed circuit described above.

The processing unit, having received the information, processes the information according to the programed arrangement of the electronic circuitry. This program of instructions, together with part of the data to be processed, is stored in the computer system's memory component. In the most popular type of memory component, tiny ferromagnetic cores are used. These are either positively or negatively magnetized, depending upon the direction in which electricity passes through them. As in the case of the other components described above, these two conditions likewise correspond to the "0" and the "1" in the binary numbers system.

One informational channel consisting of one series of these units—that is, a single circuit, one memory core, or one position on a card or tape—would have practically no processing potential. But use of a group of these informational channels, in parallel, provides this potential. With the addition of every informational channel in the processor, a larger digital number can be handled. The combinations possible through the use of several parallel channels are sufficient to encode each of the letters of the alphabet. As a result, large numbers and words can be fed into and processed in the computer. Furthermore, in a memory component, hundreds of thousands of cores can be arranged to store and retrieve vast amounts of digital data or encode first letters, then words, and thereafter long progressions of information.

After processing, the information obtained is transferred to another computer unit, the "output" component, which may be a tape unit, a card punch, a printer, or some type of visual display. If necessary, this unit can translate the information from binary terms into words, the decimal system, or some other usable form. Or, rather than "reading out" its results, the digital computer can be a part of a control system wherein information is fed into the processor on a "real time" basis and the results almost instantly transferred to some control mechanism.

Certain digital computer components are also used in conjunction with special scientific elements of unique design for scientific studies and investigations. Also, computers, or components thereof, may be coupled with cryptologic devices in security or intelligence work.

MASS PRODUCED COMPONENTS

ADP manufacturers mass produce the various components that make up a computer system. ADP systems are "configured" [4] (attached by cables and essentially "plugged" together) by combining the mass produced components previously described necessary to meet the requirements of a particular user. The task to be performed determines the arrangement, number, and type of components that make up a computer system. For economic and competitive reasons, only the smallest systems are designed and manufactured as a single unit. Since a system is made up of separate components, the customer is not asked to pay for punched card, tape, memory, printer, or other components or capacity not needed in his particular application.

GENERAL PURPOSE COMPONENTS

Most ADP components are general purpose in design and can be used in a variety of applications. Most digital computer systems can be programed to perform a wide variety of functions—administrative and technical. That equipment designed to be used in these various systems for the performance of different functions is known as "general purpose" equipment. About 90 percent of the computers in Government are general purpose. The table on the following page has been included as an indication of the varied applications of the general purpose ADP systems of which the Government has 10 or more. Specially designed equipment for unique scientific and technical purposes has been decreasing. Computer manufacturers constantly strive for flexibility in the design of their components in order to give them as broad a potential application as possible.

Under the concept of "general purpose" equipment, the combination of mass produced components can be easily altered to perform any task within the basic system's maximum capacity without rebuilding the processor or internally modifying the individual component parts even though the system may have been originally configured to perform one particular narrow function. If additional memory is needed for a new application, additional memory components can usually be added. If additional reading capacity is required, additional punched card or tape units can be obtained. Similarly, unnecessary components can be easily discarded.

SOFTWARE

Once a user has acquired an ADP system, complexities arise relating to its use. ADP systems require complex instructions to operator and machine. Operations must be charted in proper sequence and the system set up or programed to perform the necessary functions to achieve the desired result. To fulfill the needs of many users there are also "canned" programs written for general application which often require only minor revisions for any particular application.

[4] The term "design" is sometimes used to denote what is really configuration. A component is "designed" by the manufacturer to operate in a certain manner. A system is "configured" by combining the components into an arrangement for a particular application.

Major application areas of use of computer types showing an estimated number of installations of 10 or more for June 30, 1965, as reported in the Bureau of the Budget's 1964 inventory of ADP equipment in the Federal Government

System type	Number installed, June 30, 1965 (estimated)	Supply (materials)	Property (facilities)	Financial	Personnel	Natural resources	Operations	Operations control and support	Scientific and engineering
IBM 1401	422	✓	✓	✓	✓	✓	✓	✓	✓
NCR 304	176	✓	✓	✓	✓	✓	✓	✓	✓
UNI 1050	164	✓	✓	✓	✓	✓	✓	✓	✓
IBM 1620	96	✓	✓	✓	✓	✓	✓	✓	✓
RCA 301	75	✓	✓	✓	✓	✓	✓	✓	✓
CDC 160/160A	70	✓	✓	✓	✓	✓	✓	✓	✓
IBM 1410	68	✓	✓	✓	✓	✓	✓	✓	✓
IBM 7090/94	57	✓	✓	✓	✓	✓	✓	✓	✓
GE 225	34	✓	✓	✓	✓	✓	✓	✓	✓
CDC 1604	31	✓	✓	✓	✓	✓	✓	✓	✓
RCA 501	30	✓	✓	✓	✓	✓	✓	✓	✓
IBM 7040/44	24	✓	✓	✓	✓	✓	✓	✓	✓
IBM 7080	24	✓	✓	✓	✓	✓	✓	✓	✓
IBM 7070/74	23	✓	✓	✓	✓	✓	✓	✓	✓
UNI 1218	20	✓	✓	✓	✓	✓	✓	✓	✓
IBM 305	19	✓	✓	✓	✓	✓	✓	✓	✓
GNP LGP30	17	✓	✓	✓	✓	✓	✓	✓	✓
IBM 1440	17	✓	✓	✓	✓	✓	✓	✓	✓
PAB 250	17	✓	✓	✓	✓	✓	✓	✓	✓
AUT Rec 2	16	✓	✓	✓	✓	✓	✓	✓	✓
IBM 1460	15	✓	✓	✓	✓	✓	✓	✓	✓
NCR 315	15	✓	✓	✓	✓	✓	✓	✓	✓
SDS 930	15	✓	✓	✓	✓	✓	✓	✓	✓
CDC 1604	14	✓	✓	✓	✓	✓	✓	✓	✓
CDC 3600	14	✓	✓	✓	✓	✓	✓	✓	✓
HON 800	12	✓	✓	✓	✓	✓	✓	✓	✓
SDS 910	11	✓	✓	✓	✓	✓	✓	✓	✓
UNI III	11	✓	✓	✓	✓	✓	✓	✓	✓

The ancillary techniques and aids needed for proper utilization of an ADP system are commonly referred to as "software." In most instances, manufacturers' sale and lease prices include software. The costs attributable to software in the case of some ADP equipment may exceed that of the "hardware" or, in other words, of the components of the system.

DOMINATION OF ADP INDUSTRY BY IBM

There have been some 23 American ADP manufacturers, of which about 20 are currently manufacturing equipment which has been ordered. There are approximately 25,000 computers [5] of American manufacture in use in the world and an estimated 10,000 additional systems on order. International Business Machines (IBM), although operating under a 1956 antitrust consent decree [6] dominates the market with about 75 percent of the business.[7] UNIVAC Division of Sperry Rand, Burroughs, Control Data Corp., RCA, Honeywell, National Cash Register, and General Electric are other principal suppliers. Other manufacturers include: Addressograph-Multigraph Corp., Advanced Scientific Instruments, Autonetics, Bunker-Ramo Corp., Clary, Computer Control Co., Digital Equipment Corp., Friden, ITT, Monroe Calculating Machine Co., Philco, Raytheon, and Scientific Data Systems, Inc.[8]

LEASING OF ADP EQUIPMENT

Following a practice originally favored by ADP manufacturers in the 1950's, a large percentage of ADP equipment is leased. Monthly lease rates can be as low as several hundred dollars, but increase sharply with the size of the system. Monthly rentals of from $25,000 to $75,000 are not uncommon. Some of the more complex, sophisticated systems have monthly rentals of from $80,000 to $100,000. Purchasing prices vary in a corresponding degree, beginning with as low as $25,000 and going as high as several million dollars for one system.[9]

ADP systems are designed to operate on a three shift per day, round-the-clock basis. For most equipment used in Government one hundred and seventy-six hours per month (8 hours a day times 22 working days) is considered one shift. Although leasing agreements vary from manufacturer to manufacturer, the user pays for this basic shift time as well as for use of the equipment in excess thereof. In the last 2 to 3 years, while ADP lease and purchase prices have been otherwise

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[5] "Monthly Computer Census," Computers and Automation (April 1965), p. 56.
[6] *U.S. v. IBM* (Civil Action 72-344, So. Dist. N.Y.), final judgment entered Jan. 25, 1956; subsequent order entered Jan. 14, 1963.
[7] Fortune, op. cit., p. 113.
[8] "Monthly Computer Census," op. cit.
[9] Apparently all Government leases are with the manufacturers. In leasing to private industry, the manufacturers are now experiencing some competition from ADP leasing firms. According to Fortune magazine:

"They [the leasing companies] operate on the premise that a computer at the right price has a longer economic life than is assumed in the manufacturer's rentals, which recover the list price of the machine in 45 to 50 months. The leasing companies buy the used machines at a discount and rent them to customers at reduced rates. Largest in the field seems to be Boothe Leasing Corp., a subsidiary of Greyhound Corp., whose most popular plan provides a minimum saving of 10 percent. Boothe does not plan to recover its investment from its first customer with such a deal, but expects ultimately to find another home for the machine; and it offers various schemes that encourage the renter to use the computer intensively. The rate for the first 3 years, for example, may provide little savings if the machine is used only one shift during the day. But it is cheaper than the manufacturers' rates for two shifts, still cheaper for three shifts. In any event, after the third year the rent goes down steeply. Such plans, if popular, could upset the industry's current price structure, which compels a company to pay just as much rent for a 6-year-old machine as for the same model brand-new" (Fortune, op. cit., p. 207).

immune from normal competitive forces, there have been reductions in extra-shift lease rates, and in some cases extra shift charges have been eliminated.

THIRD GENERATION ADP

The early ADP systems of the 1950's with thousands of electronic vacuum tubes requiring extensive air conditioning capacity to keep them at a satisfactory temperature level were large and cumbersome. These vacuum tube systems are referred to as "first generation" equipment. In the late 1950's, ADP entered the "second generation" when small solid state transistors replaced the vacuum tubes which lessened the need for vast air conditioning capacity to keep the equipment cool. This led to improved construction techniques which, coupled with advancing circuitry design and other improvements in the "state of the art," resulted in equipment of increasing speed and capacity. Most of the equipment now in use is "second generation."

The "third generation" is close at hand. As one leading ADP expert described this coming generation:

> Huge new machines with fantastic memories and arithmetical capabilities linked to numerous smaller satellite machines and serving literally dozens of users simultaneously, are on the horizon at even lower cost.[10]

With the arrival of third generation ADP equipment, communications systems will link large, fast, high-capacity data processing systems to offices and laboratories of numerous users. These users, instead of acquiring an ADP system or visiting an ADP service center, will feed problems or information to be processed into the central computer system over a communications system. The user would have installed in his office or laboratory an input-output component no more conspicuous than commonly used teletype units found in business offices throughout the world. The user could either receive an immediate response over this unit installed in his office or laboratory or the information could be accumulated for periodic processing, recorded on tape or punched cards at the ADP center, or a printed response could be prepared at the center and mailed or otherwise delivered to him.

The technical and economic feasibility of this linkage of ADP with communications has been proved. The ever-increasing complexities of business and Government demand the fuller exploitation of ADP potential in practically every field of human endeavor. The economics of ADP design and manufacture make this third generation approach inevitable. However, second generation, or even earlier equipment, will not become obsolete overnight. Most equipment has an economic useful life which extends far beyond the point of its technical obsolescence. In a narrow sense, at present almost any ADP system, by the time it is off the drawing boards and in production, is technically obsolete. A determination to change equipment for some more advanced system should be based on the need for larger and faster capabilities. All ADP applications will not require the most advanced capabilities thereby justifying the additional expense—particularly if the costs of the older equipment have been fully amortized.

[10] Robinson, Dr. Herbert W., "The Outlook for the Automatic Data Processing Industry and the Role of C.E.I.R., Inc." Remarks before the New York Society of Security Analysts, Nov. 16, 1964. See hearings on H.R. 4845, p. 210.

Thus, the advent of more advanced systems with greater speed and capacity will not abruptly diminish the economic value of present ADP. A gradual change, however, is inevitable.

Larger computers are more efficient per unit of work. They process information faster and have larger processing capacities—but they cost more. So, to obtain the efficiency inherent in these larger new computers, they must be kept busy. As a result, fewer units of Government (or business or industry) will have sufficient requirements for processing capacity to justify sole utilization of individual systems. The potentials of the larger computers now in the offing which can be integrated with communications is so great that full utilization of one system's maximum capability is sufficient to fit the needs of scores of potential users. And, the use of the maximum potential of a third generation system under conditions of optimum efficiency can result in a phenomenal reduction in ADP costs to individual users. This greater potential and lower cost cannot be ignored by either business or Government.

As third generation time-sharing increases, the traditional agency-by-agency structure of the Government in terms of ADP management, will become less apparent and less important. Systems design will depend more upon the functional requirements of the users than their identity or jurisdiction. The need for Government-wide evaluations as to acquisition and utilization of equipment will become so pronounced as to make any narrower approach prohibitive. The waste inherent in unused potential and errors in application or equipment selection will be staggering.

B. Current Government ADP Management Techniques

At this time, ADP has many varied applications in the Federal Government. As classified by the Bureau of the Budget,[11] present applications fall into the following general categories: material, facilities, financial, personnel, and natural resources management; operations; operations control and support; scientific; and engineering. For the most part, the Government ADP listed in the nontechnical categories is used to perform cumbersome, routine administrative tasks involving large volumes of data. Without considering any classified applications in defense and security agencies, comparatively little Government ADP is part of advanced management systems directly involved in the decisionmaking process.

During the 1950's, existing management policies applicable to calculators, punched card, and other office equipment were extended to ADP. BOB concern over ADP management was usually limited to the annual agencywide budget review processes.

BOB policy responsibility for department and agency management falls within two distinct though closely related areas. First, under the Budget and Accounting Act of 1921, as amended,[12] and the Budget and Accounting Procedures Act of 1950, as amended,[13] the BOB is authorized to "* * * assemble, correlate, revise, reduce, or increase the requests for appropriations of the several departments or establishments." In other words, the Bureau of the Budget maintains the power of the "purse strings;" and, collaterally, has responsibilities to

[11] 1964 Inventory of Automatic Data Processing (ADP) Equipment in the Federal Government. Bureau of the Budget, July 1964.
[12] 42 Stat. 20; 31 U.S.C. 1.
[13] 64 Stat. 832; 31 U.S.C. 1.

investigate, coordinate, and improve the management of the various departments and agencies.

ADP MANAGEMENT STUDY BY BOB IN 1958

In 1958, BOB took note of the many specific problems inherent in ADP management. In September of that year an "ADP Responsibilities Study" was begun, to be completed in June the following year. The findings and recommendations in this 1959 BOB ADP study, portions of which are quoted throughout this report,[14] constituted a realistic evaluation of what was wrong with Government ADP management at that time and what had to be done. The study recognized the need for specialized management of ADP, for Government-wide coordination, and the fundamental importance of accurate, up-to-date information for all levels of management. "Dynamic leadership" in Government ADP management was found to be a "vital necessity." And, as long ago as 1959, this BOB study concluded that "passive, partial or informal types of leadership have had their place but have now outworn their usefulness."[15]

Unfortunately, the concept of "dynamic leadership" envisaged in this early report never came about. To a significant degree, the recommendations in this 1959 study were to be repeated in a subsequent study BOB undertook almost 6 years later.[16] The principal

[14] For the complete text of the "Report of Findings and Recommendations Resulting from the Automatic Data Processing (ADP) Responsibilities Study, September 1958 to June 1959 (conducted under the direction of the Bureau of the Budget)" see hearings on H.R. 4845, p. 567.

[15] 1959 BOB ADP study, p. 20.

[16] The 1959 BOB study contemplated that BOB would undertake the following:

"The Bureau of the Budget with the advice and assistance of agencies will assert broad, general leadership and coordination of the ADP program in the executive branch. This will involve Government-wide responsibility for the following:

"(1) Using established lines of communication, existing organizational relationships and its membership on the Policy Committee for the Joint Accounting Improvement Program and other such groups to insure effective internal and Government-wide coordination of the ADP program with related programs and activities.

"(2) Formulating and promulgating policy, criteria, and planning guidance for the ADP program of the Government.

"(3) Planning and coordinating the implementation of Government-wide ADP orientation and training.

"(4) Establishing Government-wide formulas for costing ADP applications and reviewing and analyzing summary cost data in terms of dollars and of manpower utilization.

"(5) Fostering, promoting, and coordinating the interagency sharing of ADP equipment.

"(6) Developing specific plans for an experimental computer service center and, if deemed feasible, taking action to assure the creation and operation of the same.

"(7) Coordinating ADP research and development programs of the Government.

"(8) Providing leadership in a Government-wide effort to alleviate the problems of incompatibility of ADP equipment.

"(9) Fostering and promoting studies which will lead to minimizing the vulnerability of ADP equipment to sabotage, enemy attack, or natural disaster.

"(10) Operating a Government-wide ADP Information Exchange.

"(11) Sponsoring the continuation of the Interagency Committee on ADP and assuring its effective utilization.

"(12) Reviewing and assessing progress of ADP programs in selected agencies and for the Government as a whole.

"(13) Fostering and promoting desirable standardization in ADP systems which are common to all agencies.

"(14) Using existing information sources and obtaining such additional summary information as may be essential to the effective performance of the responsibilities assigned" (1959 BOB ADP study, p. 4; hearings on H.R. 4845, p. 574).

The 1965 BOB study contained the following recommendations relative to the BOB:

CHAPTER 1

"In the development and application of policies, guidelines, and criteria, the Bureau of the Budget will use a classification system which recognizes the essential differences among computer installations. The pattern of classification suggested by the analysis made during this study will serve as the basis for developing this system."

CHAPTER 2

"1. The Bureau of the Budget will develop a broadly based program of continuous evaluation of computer systems, to provide an assessment of accomplishments and to serve as a recurring source of information for the development or revision of policies and guidelines.

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reason why the management concepts in the 1959 BOB study were not fully implemented was the need for legislation. The study recog-

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The responsibility for conducting evaluations and preparing appropriate reports will rest with the agency heads, in accordance with their normal management responsibilities.

"2. The Bureau of the Budget will develop criteria to assist in evaluating both systems design and various aspects of system performance."

CHAPTER 3

"1. The Bureau of the Budget will establish an interagency group to study and develop cost principles to be applied uniformly by agencies in establishing prices for shared computer time and services.

"2. The Bureau of the Budget will continue its evaluation of the service center concept to determine a proper course of action to be taken.

"3. The Bureau of the Budget will, with the assistance of the major agencies concerned, undertake a study of the problems associated with the use of contractor organizations for providing services related to electronic data processing activities, with a view toward developing policies, guidelines, or actions that the study may indicate are needed."

CHAPTER 4

"1. The Bureau of the Budget will provide for the publication of criteria, guidelines, or regulations covering the selection of electronic data processing equipment. It will do this through new issuances or by expanding upon current issuances, covering the following subjects:

"a. The preparation of system specifications, including benchmark problems, to be furnished equipment suppliers in requests for proposals.

"b. Evaluation of suppliers' proposals.

"c. Compatibility considerations.

"d. Consideration of excess and surplus equipment.

"e. Distinctions to be made between additions, replacements, and modifications when selection policies and criteria are applied.

"f. Interagency sharing of experiences in the selection and performance of equipment."

CHAPTER 7

"1. The Bureau of the Budget will assume overall leadership of an executive branch program for the standardization of automatic data processing equipment and techniques for its use. In the fulfillment of this responsibility the Bureau will:

"a. Establish standardization policies and objectives.

"b. Insure that the American Standards Association program for the development of voluntary American standards for automatic data processing equipment and techniques receives more adequate support by the Federal Government.

"c. Provide for appropriate Government use of American ADP standards approved by the American Standards Association, when it is in the best interests of the Government and the Nation to take this action.

"d. Provide for the approval and implementation of Federal ADP standards in those instances in which the needs of the Government would not be served by adoption of voluntary American standards approved by the American Standards Association, or interim standards are needed pending adoption of an American standard."

"3. The Bureau of the Budget will assume overall leadership of a program for the standardization of data elements in common use in the Government and the codes used to represent those elements. In the fulfillment of this responsibility the Bureau will:

"a. Invite agencies to submit information and recommendations concerning data elements in common use that should be considered for standardization.

"b. Assign responsibility for the studies necessary to establish the feasibility of standardization of data elements and codes.

"c. Make provision for the approval and implementation of standard data elements and codes, the use of which involves two or more agencies.

"d. Make provision for the revision of standard data elements and codes when circumstances justify this action."

CHAPTER 9

"1. The Bureau of the Budget will revise its current policies to provide that (a) established criteria with respect to the purchase or rental of automatic data processing equipment shall be applied in determining costs to be reimbursed under cost-reimbursement type contracts, and (b) agencies will include equipment operated by their cost-reimbursement type contractors in intra-agency sharing arrangements.

"2. The Bureau of the Budget, in cooperation with the Department of Defense, National Aeronautics and Space Administration, Atomic Energy Commission, General Services Administration, and other agencies will undertake the development of reporting procedures to obtain an inventory, together with related data on costs, of automatic data processing equipment and services provided under cost-reimbursement type contracts. This information should be incorporated in the ADP management information system recommended in chapter 10."

CHAPTER 10

"The Bureau of the Budget will undertake the development of a broadly based ADP management information system as a matter of high priority, and will seek the advice and assistance of those agencies most vitally concerned, including agencies with Government-wide responsibilities, such as the General Services Administration and the Civil Service Commission."

nized, but did not emphasize, the possibility that legislation might be necessary. Those making the study were perhaps unrealistically optimistic in believing that a program of the magnitude they envisaged involving all agencies of Government and billions in tax funds could be brought about without statutory definition of the "clear delineation of responsibilities and [the] organization plan" they considered essential. The 1959 BOB ADP study was strong and clear as to what had to be done, but relatively weak and ineffective as to how to do it.

BOB MANAGEMENT GUIDELINES

BOB has issued ADP management "guidelines." In March 1960, BOB issued Bulletin 60–6 entitled "Guidelines for Studies To Precede the Acquisition of Automatic Data Processing Equipment."[17] These guidelines generally conformed to the contents of a letter the Comptroller General had addressed to the various executive departments and agencies in September 1957. This information concerning the need for and the nature of ADP feasibility studies was undoubtedly of value to the various agencies. But, Bulletin 60–6 made it clear that the guidelines were advisory and that there was no requirement that agencies contemplating the acquisition of ADP follow this recommended evaluation procedure.

Some 18 months later, in October 1961, the BOB issued Circular A–54 outlining "Policies on Selection and Acquisition of Automatic Data Processing (ADP) Equipment."[18] The principal factors discussed in this circular were:

1. The desirability of selecting on the basis of exact system specifications.
2. That equal opportunity and appropriate consideration should be afforded all manufacturers who offer equipment capable of meeting systems specifications.
3. That two primary factors should be considered in the selection of equipment: (*a*) its capability to fulfill system specifications, and (*b*) its overall costs.
4. The need for effective lease versus purchase evaluations.

On March 14, 1962, the BOB directed agencies to furnish annual reports on their ADP inventories as well as limited information as to ADP utilization. In August 1963, BOB published Circular A–61, essentially a more comprehensive statement of the Bureau's ADP management guidelines and consisting substantially of the earlier guidelines referred to above.[19]

Subsequently, BOB has issued other circulars relating to ADP concerning matters other than management policy—the establishment of an experimental sharing exchange and computer service center (Bulletin 64–9, Jan. 2, 1964),[20] and an ADP sharing program (Circular A–27, June 15, 1964) under the responsibility of the Administrator of General Services.[21]

Also, in February 1965, the BOB submitted a "Report to the President on the Management of Automatic Data Processing in the Federal

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[17] All BOB circulars, bulletins, and other directives relating to ADP are set forth in app. B of the hearings on H.R. 4845, p. 270.
[18] Ibid., p. 286.
[19] Ibid., p. 292.
[20] Ibid., p. 347.
[21] Ibid., p. 350.

Government," [22] surveying some of the more serious ADP management problems and containing a series of recommendations to deal with them. On March 6, 1965, BOB issued Circular A–71 implementing these recommendations and delineating the responsibilities for ADP management as between the BOB, the GSA, and the National Bureau of Standards.[23]

INEFFECTIVENESS OF GUIDELINES

Since 1958, up to the time of the hearings on H.R. 4845, the GAO had issued approximately 100 audit reports to agencies, congressional committees, and to Congress revealing serious shortcomings in the manner in which specific agencies acquired and/or utilized ADP equipment.[24] The major deficiencies cited in these reports have been:

(*a*) Inadequate feasibility studies.

(*b*) Uneconomical and ineffective equipment utilization.

(*c*) Overpayments resulting from inadequate management practices.

(*d*) Uneconomical procurement of equipment.

Excluding the 29 reports dealing with inefficiencies in the manner in which ADP equipment has been acquired by certain Government contractors, most of the deficiencies outlined in this series of reports constituted violations of BOB guidelines, or otherwise demonstrated the need for a more effective management system based upon a broader Government-wide coordinated approach. These reports, aimed specifically at the independent operations of individual user agencies, have demonstrated that guidelines of an advisory nature and without provisions for effective review or "feedback" of information as to agencies' compliance or the need for policy changes do not meet the Government's ADP management needs.

C. The Need for Government-Wide Coordination in ADP Management

COORDINATION FUNDAMENTAL TO GOOD MANAGEMENT

There are countless examples of the benefits of coordination in business and Government. In recent years, for example, the Secretary of Defense has achieved significant improvements in operations and large savings in tax funds by consolidating the management of defense logistics and other defense support functions. On January 29, 1962, in hearings before the House Subcommittee on Defense Appropriations, Secretary McNamara said:

> One of the most productive fields for the economic application of centralized management is in the provision of common supplies and related services to all the military departments.
>
> After a rather comprehensive study of this entire problem, we came to the conclusion that considerable economy and effi-

[22] "Report to the President on the Management of Automatic Data Processing in the Federal Government," prepared by the Bureau of the Budget (March 1965); this report has been printed as S. Doc. 15, 89th Cong., 1st sess.; subsequent page references in this report will be to the Senate document.

[23] Hearings on H.R. 4845, p. 353.

[24] In app. B of the hearings on H.R. 4845 is a summary of the most significant of these reports.

ciency could be gained, if all common supply management activities were consolidated in a single agency.[25]

This philosophy has been applied to a number of functions in the Defense Department, including intelligence, communications, and, under the Defense Supply Agency, the coordination among the services of approximately $3 billion of industrial-type production equipment which the Government owns and furnishes defense contractors for use in Government work.

On March 28, 1963, in hearings before the Joint Economic Committee, the Secretary pointed out that the concept of consolidated management need not be limited to the Defense Department:

> The basic principle that there should be a single agency to procure and manage common items of supply or services for all users is, as this committee has repeatedly pointed out, as valid for the Government as a whole as it is for the Department of Defense. Therefore, in our own efforts to obtain greater efficiency through the consolidation of common logistics support activities, we should not restrict ourselves to Defense agencies alone. Whenever we find that it is more economical to use the capabilities or facilities of other Government agencies, with no loss in military effectiveness, and at the same or less cost, we should not and have not hesitated to do so.[26]

General purpose ADP is a "common item" throughout the Federal Government. While the coordinated Government-wide management system provided in H.R. 4845 may not provide the same degree of centralized management of ADP as the Secretary has applied in the various defense support areas referred to above, the same principles apply. For this reason, there is no legitimate reason why the Government should not obtain the benefits inherent in a Government-wide coordinated approach to ADP management.

GOVERNMENT-WIDE COODINATION RECOMMENDED BY GAO IN 1958

Concern over our present disjointed agency-by-agency approach to ADP management is no recent development. On June 27, 1958, the Comptroller General issued the first of four comprehensive Government-wide ADP management reports.[27] This early report outlined the tremendous potential of ADP but stressed concern over certain trends in ADP acquisition and use which he believed would inevitably lead to costly inefficiencies. Concern was expressed over the practice of substituting ADP for less sophisticated equipment rather than integrating ADP into agency procedures and functions on a systematic basis. But, most important, this report pointed out that there was no single agency of the Government responsible for directing and coordinating continuing developments in this field. Accordingly, the report stressed as a principal recommendation the need to establish an effective coordinated ADP program of joint effort by the various user agencies in Government.

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[25] Testimony of Secretary of Defense McNamara, House Subcommittee on Defense Appropriations, Jan. 29, 1962, p. 153; reprinted in hearings on H.R. 4845, p. 205.

[26] Statement of Secretary of Defense McNamara, hearing before the Joint Economic Committee, Mar. 28, 1963, p. 20; reprinted in hearings on H.R. 4845, p. 206.

[27] "Summary of Progress and Trend of Development and Use of Automatic Data Processing in Business and Management Control Systems of the Federal Government as of December 1957," Comptroller General of the United States (June 1958), GAO file No. B-115369.

COMPTROLLER GENERAL RECOMMENDATIONS IN 1960 AND 1963

On December 30, 1960, the GAO issued a second Government-wide audit report.[28] Aside from urging greater ADP utilization in certain defense functions readily adaptable to ADP, this report again emphasized the need for Government-wide coordination in ADP management. The report endorsed the 1959 BOB ADP study but again called attention to the lack of positive central planning of a long-range nature within the executive branch to promote the maximum degree of efficiency, economy, and effectiveness in ADP use.

On March 6, 1963, a third Government-wide audit report was issued.[29] In this report, the GAO demonstrated that very substantial sums could be saved if the Federal Government purchased a larger percentage of its ADP equipment. The report contained detailed lease versus purchase cost comparisons of 16 different widely used ADP systems. Applying these comparisons to 523 of the approximately 1,000 systems then installed or on order as of June 30, 1963, the GAO estimated potential savings of about $148 million over a 5-year period with savings of approximately $100 million a year thereafter through the selective purchase of certain of the components of certain systems.

In this report, the GAO, cognizant of the extent BOB had been able to implement the recommendations contained in the 1959 BOB ADP study, stressed that, "We are aware of no significant progress toward an effective coordinating mechanism in the Federal Government for achieving the interrelated objectives cited";[30] that is, efficient, businesslike, Government-wide coordinated ADP management. The report warned that to fully realize savings of this magnitude, that a basic change from an agency-by-agency approach to a Government-wide coordinated management system must be made. As an example, decisions as to the advantages of lease versus purchase should be made from the standpoint of the Government as a whole, and not primarily from the standpoint of the potential use of the system to the initial using agency. The report also indicated the low ebb in Government ADP utilization. ADP systems are designed (technically and economically) to operate three shifts a day but at that time average Federal usage was little more than one shift a day. The report concluded by reasserting the recommendation of some 5 years' standing that there be Government-wide coordination in ADP management.

REPORT BY GAO IN 1964

On April 30, 1964, the fourth and most recent comprehensive Government-wide ADP report was submitted to Congress.[31] This report updated Government management developments for the year following the issuance of the March 1963 report discussed above. The GAO noted limited improvements but warned that optimum efficiency and effectiveness would not be achieved without Government-wide coordination. During this period, this committee had recommended

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[28] "Review of Automatic Data Processing Developments in the Federal Government," by the Comptroller General of the United States (December 1960), GAO file No. B-115369.

[29] "Study of Financial Advantages of Purchasing Over Leasing of Electronic Data Processing Equipment in the Federal Government," by the Comptroller General of the United States (March 1963), GAO file No. B-115369.

[30] Ibid., p. 38.

[31] "Review of Problems Relating to Management and Administration of Electronic Data Processing Systems in the Federal Government," by the Comptroller General of the United States (April 1964), GAO file No. B-115369.

and the House had approved H.R. 5171,[32] the forerunner of this legislation, to provide for coordination in Government ADP management. Although this legislation was not acted upon by the Senate, there was a significant reaction to the bill in the executive branch of the Government. And in the April 1964 report the Comptroller General was able to point to limited improvements in certain aspects of Government ADP management. But he cautioned that the advances that were possible under the present agency-by-agency approach were limited, and again he emphasized the need for Government-wide coordination and warned that in the absence of a Government-wide approach to ADP management, an optimum degree of efficiency and economy could not be achieved.

D. Effective Government-wide Management of ADP Provided by H.R. 4845

Responsibilities of BOB, GSA, and the Department of Commerce

To achieve a businesslike Government-wide coordinated management effort, it is necessary that additional authority be given to BOB, GSA, and the Department of Commerce. In the 1959 BOB study, the future course of Government ADP management was discussed as follows:

> At this point in time [1959] we in the Government have entered that stage of the ADP era which may be classified as sober reflection. We have now isolated and identified the major problems which need attention, as succeeding sections of this report will demonstrate. There are some unanswered questions as to exactly where we stand in a Government-wide sense, but we soon will find the needed answers. We are not exactly sure as to what the future holds, but we soon will have mapped a desirable course to follow. For these things we need a clear delineation of responsibilities and an organization plan.[33]

The hopes expressed in the BOB's 1959 ADP study have not been fulfilled, and it is evident that Congress must provide a clearer delineation of responsibilities and a more definite organizational plan if the Government is to have maximum efficiency in ADP management. Again, as in 1959, the Government is about to enter into a more sophisticated stage of ADP usage. With third generation equipment and ensuing developments will come broader ADP utilization and vastly increased Federal ADP expenditures. Thus, aside from the current problems, more effective techniques must be devised for the management of ADP equipment if in the future we are to avoid even more costly errors which otherwise will accompany Government ADP usage into this newer generation.

Although H.R. 4845 provides for fundamental changes in Government ADP management, the bill in many respects is very limited in scope. In essence, the bill would improve the operational machinery available to the Government making it possible for those agencies which currently have ADP management responsibilities to do a better job. In many respects, this legislation provides the delineation of

[32] H. Rept. 428, 88th Cong., 1st sess., approved House of Representatives, July 18, 1963.
[33] 1959 Bureau of the Budget ADP study, p. 4; hearings on H.R. 4845, p. 574.

responsibilities and stronger organizational plan for Government ADP management that was the goal of the BOB in 1959. The 1959 BOB study states:

> To a large degree, the recommended program for the Bureau of the Budget is really nothing but a plan by which the Bureau may begin to perform more adequately than it has, the *responsibilities already clearly assigned to it.* [Emphasis by BOB.][34]

BOB CONTROL OVER FISCAL AND POLICY MATTERS

While H.R. 4845 is not primarily concerned with determining policies, by providing the means with which adequate information can be obtained, joint effort efficiently applied, and new management techniques devised, this legislation makes it possible to determine effective policies and achieve fiscal control. Under H.R. 4845, "fiscal and policy" control over ADP management remains in the BOB. Thus, the bill does not violate or compromise the traditional policymaking and fiscal control functions of this staff office of the President. Any action of any agency, under authority of this legislation, would be subject either to approval or review at BOB.

Also, BOB would not be delegated any operational responsibilities of the ADP management program. As time passes, countless important Government management problems must be dealt with at the BOB level. The assumption of operational responsibilities incident to the solution of these problems could hamper BOB's ability to fulfill its primary mission as a staff office of the President dealing with policy and fiscal matters.

GENERAL OPERATIONAL RESPONSIBILITY IN GSA

H.R. 4845 extends to the Administrator of General Services the primary operational responsibility for coordinating Government ADP management subject to BOB policy and fiscal control. This delegation, as in the case of the BOB, is in line with the traditional delegation of authority to GSA. H.R. 4845 is an amendment to the basic statute which created this Government-wide service organization. This delegation would augment specific ADP management functions, such as ADP procurement, presently within the scope of GSA responsibilities.

To carry out this function, GSA is authorized and directed to coordinate ADP management and to administer an ADP "revolving fund." This fund, used in conjunction with the coordinating authority, would afford an effective means of (*a*) providing the Government with more adequate management information, (*b*) achieving optimum utilization, and (*c*) attaining economic acquisition of Government ADP equipment.

Through the use of the revolving fund, GSA would acquire by lease or purchase the ADP needed to fulfill requirements of the agencies. Agencies would obtain annual appropriations from Congress necessary to reimburse the revolving fund. Although the Comptroller General normally does not approve of revolving funds, he specifically endorses the use of such a funding arrangement in this instance.

[34] Ibid., p. 7; hearings on H.R. 4845, p. 577.

In addition to the fiscal and policy control of the BOB, the bill expressly limits GSA's authority. Agencies would maintain their present independence in the determination of ADP requirements. Agencies would be free from any interference from GSA as to the manner in which ADP equipment is used. They would be advised of all significant decisions affecting their ADP operations and would have the right to appeal to BOB. The bill limits GSA's authority to "operate" ADP (other than its own in-house equipment) under this management program to those instances where multiple agency usage of equipment is involved.

TECHNICAL SUPPORT OF THE NATIONAL BUREAU OF STANDARDS

The technical aspects of this coordinated management program remain with the National Bureau of Standards in the Department of Commerce. Again, this delegation is in accordance with the traditional responsibilities of the agency. The Bureau of Standards has done considerable ADP research in the past and has made many contributions to the "state of the art." The Bureau of Standards would offer technical support to the BOB and GSA and would also act in an advisory capacity to the various agencies and other users when requested. Aside from these routine responsibilities, the Bureau of Standards would undertake whatever research and development is necessary to the interests of the Government, supplementing similar efforts underway in various user agencies.

Among the more serious problems confronting the Government in ADP utilization is the lack of compatibility in equipment. Standardization has been a problem in Government almost from the time this equipment was introduced. For the past several years, various user agencies, the Bureau of the Budget, and this and other committees have been concerned over the lack of compatibility in equipment which has seriously compromised the Government's overall ADP potential. This problem was discussed in an earlier report of this committee in 1963 [35] in conjunction with the activities of the Bureau of Standards. At that time, it was recognized that, to a large degree, progress in the standardization of equipment must come from ADP manufacturers. The manufacturers have the technical know-how to evaluate the alternatives and they would design and build the equipment.

It has also been recognized, however, that the Government's dominant role as the world's largest ADP user requires that there be a continuous source of Government interest and concern in the achievement of greater standardization. Under H.R. 4845, the National Bureau of Standards is expressly extended the responsibility for representing the Government in this standardization effort and submitting to the President any recommendations for further Government action as may be necessary.

It is not the intent of this legislation to authorize the Bureau to structure a broad research and development program without regard to the work of the various other agencies or in a futile effort to overtake the research and development capacity of the industry. The authority in this legislation is aimed at supplementing the Government research effort in coordination with other Federal agencies and monitoring developments in the industry for the specific purposes provided in the legislation.

[35] H. Rept. 456, 88th Cong., 1st sess. (1963).

E. How the Authority Delegated in H.R. 4845 Would Be Used To Improve Government ADP Management

H.R. 4845 is aimed primarily at filling three vital management needs at this time. These are (1) more adequate management information, (2) optimum utilization through sharing and multiple use, and (3) economic acquisition. Realization of an economical ADP acquisition program, in turn, involves three principal factors:

(*a*) Improving the Government's bargaining position through volume acquisitions;

(*b*) Basing lease versus purchase evaluations, whenever possible, on the long-term value of the equipment to the Government as a whole; and

(*c*) Selecting that equipment for purchase which, on a Government-wide basis, offers the largest purchase advantage.

CONTINUOUS FLOW OF RECURRING DATA PROVIDED BY H.R. 4845

Timely, pertinent, accurate information is indispensable to the management concept. In a sense, management consists of the collection and assimilation of data needed to predict as many imponderables as possible so as to afford the manager as many options or alternatives as a particular problem or circumstance permits. Sound decisionmaking is synonymous with good management and is inseparable from the quality of the information on which the decisions are based. Information thus minimizes the guesswork in decisionmaking and creates the opportunity for more effective and efficient management.

A basic problem in Government ADP management up to this time has been the lack of accurate management information. BOB, the executive agency having overall management policy responsibilities for ADP, has not had the information needed to properly coordinate and oversee the Government's ADP affairs. In the 1959 ADP management study, BOB recognized the need for adequate management information. The report contained a finding that:

> No provision has been made to assemble Government-wide factual data on ADP utilization in the executive branch on a recurring basis.
>
> Recent studies of ADP utilization, or certain of its aspects, have highlighted the continuous need for selected current factual data on a Government-wide basis in the ADP program.
>
> The responsibility for leadership, coordination, or review of ADP utilization at the agency level, or on a Government-wide basis, can be discharged adequately only if certain essential information is continuously available.[36]

Following this finding, the 1959 report recommended that provisions be made for the supply of adequate information needed for ADP management. Unfortunately, this recommendation was never fully implemented. On March 14, 1962, BOB directed agencies to furnish annual ADP inventory reports which also contained limited information on ADP utilization and whether the equipment was leased or purchased. Additional information was requested as of November 1963, but this was for use in the preparation of the 1965 BOB ADP study. As Circular A–55 pointed out:

[36] 1959 Bureau of the Budget ADP study, p. 12; hearings on H.R. 4845, p. 582.

> Some of the changes, particularly those that require new and additional information, have been instituted to provide information for use in a special study of ADP policies and practices recently directed by the President, and therefore will not necessarily be continued in future years.[37]

Reporting on an annual basis was continued, which means that the Government has never had up-to-date inventory information. Nor has there been any systematic consolidation of fiscal data. Most Government-wide fiscal data is in the form of estimates, some of which are highly speculative. ADP appropriations are scattered throughout the Federal budget.

Whatever BOB has done or has been able to do has been woefully inadequate compared to the need. Annual printed inventories containing meager information, months out of date, unaccompanied by any comprehensive, accurate fiscal data as to investment, expenditures, or costs, are wholly inadequate for ADP management purposes. It is ironic that ADP with such potential for data control has not been used extensively in ADP management. Certainly a basic requirement for any effective Government ADP management program is the constant availability of comprehensive, accurate, up-to-date inventories and fiscal information as to Government equipment as well as prospective requirements.

This information is needed for a number of purposes. First, the President and the Congress require overall inventory and fiscal data to maintain policy and budgetary control over ADP expenditures. Furthermore, those Federal officials with policymaking, fiscal, or operational responsibilities for ADP require this information to do their jobs. As the 1959 BOB study suggested:

> * * * if there is to be objective leadership and coordination of the ADP program of the Government, the leaders and coordinators must be informed.[38]

As discussed above, BOB has in the past relied upon policy guidelines which have been permissive and subject to agency avoidance without notice or explanation. Even if lack of compliance with existing policy is wholly justifiable in isolated instances, those with policy enforcement responsibilities must be kept informed. They must have some form of informational "feedback" to keep them advised of what is going on. Otherwise, their policymaking activity has little impact. Officials with coordinating authority also require all the reliable, pertinent, up-to-date information they can get to take advantage of the options or alternatives this information reveals to them to increase the utilization or provide for the more economical acquisition of equipment.

H.R. 4845 would provide the means by which readily available, recurring data essential to effective management could be collected and made available to those officials in the Government requiring it. Under this legislation, GSA would establish a comprehensive inventory to maintain carefully selected data needed for Government ADP management. Use of ADP would make it possible for such information to be available on a continuing basis. Collateral to the inventory would be the information stemming from the operations of the

[37] Bureau of the Budget Circular No. A–55, revised, Nov. 15, 1963; hearings on H.R. 4845, p. 316.
[38] 1959 Bureau of the Budget ADP study, op. cit., p. 13.

revolving fund which would afford the necessary flow of up-to-date, accurate, detailed information on investment, disbursements, and costs.

It is contemplated that this information, particularly at it relates to prospective agency ADP requirements, would be made generally available to ADP manufacturers upon request. Extending to all manufacturers the most advanced information available on prospective Government ADP requirements would permit more extended periods of time in which the manufacturers could evaluate Government specifications and refine the proposals they submit. General availability of information on prospective Government requirements should provide for fairer competition among all the various ADP manufacturers, some of whom at this time it is suspected do not "get the word" on some Government procurements until it is too late to submit an effective proposal. Under this approach, all manufacturers would have a better opportunity to compete for Government business purely on the basis of quality and cost. The result should be increased competition to the benefit of the Government.

OPTIMUM UTILIZATION OF ADP THROUGH SHARING AND SERVICE CENTERS UNDER H.R. 4845

Under H.R. 4845, GSA could provide optimum Government ADP utilization by improving the sharing program and establishing multiagency ADP service centers. ADP is designed to operate three shifts a day. But Government utilization falls far below any optimum level of utilization. The BOB inventory report of August 1962 showed extremely low utilization throughout the Government. The average was only 267 hours out of a possible 720 hours per month. Only 24 percent of the total installed equipment was reported as being operated the equivalent of two shifts a day. The BOB inventory of July 1964 indicated that approximately 38 percent of Government ADP was being operated as much as two shifts. While these figures indicate an improvement, there is widespread waste in available but unused Government ADP equipment time. The problem of maintaining optimum utilization will become more difficult as newer ADP systems with greater speeds and capacity are introduced into Government use.

The BOB 1965 ADP management study reports a total of some 500,000 hours of unused Government ADP capacity at this time. About 170,000 hours of this total is characterized as available for sharing. The remaining 330,000 is considered unused but unavailable for a number of reasons put forward by the various agencies. The BOB study did not substantiate the reasons given. There are many justifiable reasons for disqualifying individual ADP systems for sharing that must be respected. But this estimate of available ADP capacity may well be subject to upward revision if some of the reasons given by agencies to avoid sharing were routinely subjected to closer inspection and review.

Aside from utilizing otherwise available but unused ADP capacity, sharing has other advantages. It makes the use of larger computers with lower unit costs feasible. The introduction of the third generation ADP equipment alone would justify the coordinated approach in the use of Government ADP as provided in this legislation. There is also another significant advantage in sharing. It will increase the tendency of the various agencies to work together more closely in

solving mutual problems in the "software" area. The waste that prevails in the duplication of effort in solving "software" problems which have a common applicability to many agencies are as serious as the wastes in "hardware."

On June 15, 1964, BOB, in Circular A–27, set up an ADP sharing program under GSA.[39] There is general agreement, however, that this legislation would substantially improve the effectiveness and efficiency of GSA's efforts. Essentially, sharing is an interagency coordinating effort. As the 1959 BOB study pointed out, sharing "requires centralized coordinative-type leadership if it is to reach a level consistent with effective and economical utilization of equipment."[40] H.R. 4845 would substantially improve the present Government ADP sharing efforts in a number of respects. First, the information generated by the ADP inventory would allow GSA to consider systematically the possible combinations in matching unused capacity with prospective requirements. Second, the cost data developed through use of the revolving fund and the inventory system would furnish GSA with reliable information needed to prorate costs between agencies and otherwise to determine user charges. Third, the revolving fund offers a simple and effective means for reimbusing and charging the various agencies involved in sharing arrangements since all payments would be to or from the fund. Fourth, when feasible, GSA could establish (and operate, if necessary) multiagency service centers to furnish ADP capacity to various agencies and other users. Such service centers would bring the use of ADP within the economical reach of smaller agencies and Government offices. There may be no single user in the area with sufficient requirements to justify acquisition of the most efficient system needed but, acting together, several users could benefit from the economies inherent in a larger, faster computer.

F. H.R. 4845 Would Provide for More Economic ADP Acquisition

STRENGTHENING OF GOVERNMENT'S BARGAINING POSITION

The Government is the largest ADP user in the world. Through lease and purchase contracts, billions in tax funds are invested annually. Yet, as the 1965 BOB study points out, "The Government obtains no special advantages as a volume purchaser of equipment."[41] The smallest company, with the most limited ADP requirements, can acquire the various commercial general purpose ADP systems at prices comparable to those paid by the Government. Though volume acquisitions should inherently place the Government in a stronger bargaining position and lead to volume discounts, as a matter of practice under the present disjointed agency-by-agency system of Government ADP management, the Government has hardly any bargaining position at all.

Over the years agencies have acquired commercial, general purpose ADP at prices listed on GSA supply schedules. As in the case of many other supplies the Government requires, GSA enters into negotiations with various ADP manufacturers and agrees upon prices

[39] Hearings on H.R. 4845, p. 350.
[40] 1959 Bureau of the Budget ADP study, op. cit., p. 29; hearings on H.R. 4845, p. 599.
[41] 1965 BOB ADP study, p. 41.

for the equipment they have to offer to be applied to Government leases and purchases during the coming fiscal year. Upon completion of these negotiations, price schedules for the different manufacturers are distributed to the various agencies and, generally, the equipment they need is acquired at the prices listed on the schedules. Manufacturers have occasionally offered an agency lower prices on particular procurements than are listed on the GSA schedules. In these instances, the manufacturer files an amendment to his GSA schedule price and the lower price is applicable to all Government acquisitions of that equipment for the remainder of the fiscal year. GSA has been able to obtain some concessions from manufacturers on lease prices and conditions, particularly second and third shift use rates. Otherwise, the GSA schedules generally reflect the manufacturers' list prices.

Under this procedure, price determination and procurement are divorced. The various manufacturers have no guarantee that the Government will lease or purchase any particular volume of their equipment. As a result, some manufacturers' representatives characterize the GSA price schedule as simply a "hunting license." Agreement to a schedule of prices with GSA permits them to embark upon the more formidable task of hunting for agencies in the Government desirous of leasing or purchasing their equipment. Under these circumstances, it is somewhat understandable why manufacturers have generally responded with a remarkable degree of disinterest in price cutting in GSA contract price schedule negotiations.

GSA, with no alternate course of action, has been forced to extend price negotiations in many instances well beyond the beginning of the fiscal year to which the schedules apply in an effort to obtain better terms and conditions. These delays in themselves have caused administrative problems.

VOLUME DISCOUNTS FROM VOLUME PROCUREMENT

To obtain volume discounts, the Government must have volume procurement. The "open end" supply contract simply is not the most suitable arrangement for ADP procurement. The basic problem is that this form of contract procedure does not afford the Government any advantage corresponding to the volume of equipment leased or purchased. A specialized approach to Government ADP procurement is needed. As the 1959 BOB study suggests:

> It is most unusual to promulgate Government-wide policies on specific equipments. However, as the General Accounting Office has already recognized, the use of ADP equipment has now demonstrated that its impact is such as to warrent specialized attention.[42]

The 1965 BOB study recognizes this problem but offers an inadequate solution. Under the BOB approach, negotiation deadlines would be established and manufacturers failing to agree to terms would be precluded from Government procurement activities. Although the 1965 BOB study offers this deadline concept as a principal solution, the study also recognizes its limitations. As an example, in the report it is stated:

> On both sides, maneuverability is curtailed if an impasse [in negotiations] is reached. The Government is faced with

[42] 1959 BOB ADP study, p. 21; hearings on H.R. 4845, p. 591.

> the possibility that the contractor may remove rented equipment from the premises if a contract is not executed by July 1 (although realistically he would probably not resort to such drastic action in view of the financial impact). The manufacturer, on the other hand, is faced with the possibility that the Government may release the rented equipment on July 1 (although realistically it could not do this in view of the extensive work and cost involved in changing to another manufacturer's equipment). Consequently, both parties must proceed toward a final agreement, despite the length of time involved.[43]

This "deadline" approach unrealistically assumes that the agencies can arbitrarily be deprived of the equipment of a particular manufacturer even though it may be needed in critical Government programs. But, fundamentally, the problem is that the deadline approach applies with equal force to both the Government and the manufacturers. The Government's relative position is not improved by the application of a deadline to negotiations. There must be a relative improvement in the Government's position as contrasted to that of the manufacturer. And, to demand volume discounts, the Government must in fact procure ADP in volume rather than on a piecemeal agency-by-agency basis.

SINGLE PURCHASER CONCEPT

The traditionally accepted solution to this type of problem has been the "single purchaser" concept. Were all ADP purchase and lease money in "one pocket," the Government would be in a stronger bargaining position in dealing with manufacturers. The purchase or lease of equipment and the price to be paid would be part of the same negotiation. Whenever feasible, the Government could "raise the stakes" by coordinating the acquisition of as much equipment of one particular manufacturer at one time as possible. Furthermore, whenever alternative systems of different manufacture would be equally acceptable in satisfying agency requirements, teams of Government negotiators, made up of GSA officials and procurement specialists from the agencies involved, could pit one manufacturer against another until competitive prices were obtained.

ACQUISITION OF GENERAL PURPOSE COMPONENTS OF UNIQUE SYSTEMS UNDER A VOLUME PROCUREMENT PROGRAM

The mass-produced, commercially available, general purpose components of "unique," "tailor made," "specially designed," ADP systems can be effectively acquired under a volume procurement program. Arguments against sole source procurement and the possibility of the Government's obtaining price concessions incident to volume acquisitions center upon the proposition that each ADP system in unique, "tailor made," and designed for one particular application. As the 1965 BOB study discussed the matter:

> When the possibility of discounts has been discussed, manufacturers have indicated that discounts from list prices cannot be made solely on the basis of the number of units sold.

[43] 1965 BOB ADP, study, p. 42.

> The reason is that the price covers more than just the equipment itself: it includes the provision of all supporting services, such as computer programs, compilers, special-purpose routines, and specialized training and systems aids—all of which vary and tend to be custom-tailored for each installation. Because of these variances, the costs incurred by the manufacturer to support each installation are substantially the same and are not reduced by virtue of many installations.[44]

These "custom-tailored" items referred to by BOB relate to "software" and not the mass-produced, general purpose "hardware" components making up these specially designed ADP systems. As pointed out earlier in this report, these mass-produced components can be arranged in varying combinations to meet the particular application of the user. Inherently, all commercially available, general purpose ADP systems except those of the most unique application have a basic capability which can be applied to many uses in agencies throughout the Government. And, even when a system has been designed to meet a particular narrow application, additional components can be easily added to broaden its use. Changes of this kind are considered routine.

Under this legislation, GSA is not charged with either the selection or the use of equipment. The agencies would determine their individual requirements and use the equipment as they see fit. GSA would be furnished a shopping list of commercially available general purpose ADP system components. Once other aspects of this coordinating system have been fully implemented so that adequate information is available, GSA could coordinate ADP acquisition and schedule as large a volume of acquisitions as agency requirements permit. To the agency, the system may be complex, specially designed and tailor made to fill some particular application critical to its operations. But, to GSA, as far as hardware procurement is concerned, these complex, highly specialized systems would only be a list of mass-produced, commercially available general purpose components.

Although software procurement would present a more complex problem, there is no reason that these complexities should interfere with the establishment of a single purchaser concept as provided in H.R. 4845. Software procurement offers great potential for savings. Under this coordinated Governmentwide ADP management program, Government expenditures for these goods and services would be closely defined. Once properly identified, there could be more effective management of software procurement either directly by the agencies or by GSA in conjunction with hardware acquisition. There is no reason why Government software acquisition cannot be subjected to more systematic and orderly procurement procedures. There is also greater potential competition in software procurement, since software does not necessarily have to be furnished by the manufacturer of the equipment.

USE OF REVOLVING FUND PROVIDED IN H.R. 4845 TO OBTAIN VOLUME ACQUISITIONS

The revolving fund concept provided in H.R. 4845, as discussed above, is needed to provide the Government with an accurate, up-to-date flow of fiscal information and to facilitate optimum ADP util-

[44] Ibid., p. 44.

ization through sharing and joint use of equipment. But, the most compelling need for the revolving fund is in establishing the single purchaser concept in Government ADP acquisition.

Under this arrangement, GSA would have all of the Government's general purpose ADP acquisition money in its pocket and would be in a position, once all aspects of the coordinating program have been fully implemented so that adequate information of prospective Government agency requirements is available, to offer ADP manufacturers firm contracts for specific amounts of ADP equipment. In turn, GSA could reasonably expect to receive some reduction in purchase and lease prices reflecting the magnitude of the Government's acquisition.

The revolving fund established under H.R. 4845 would be primed with capital appropriated directly by Congress and augmented by the unamortized value of the general purpose equipment now in Government agencies which the Government has purchased. GSA would use these funds to acquire by lease or purchase the ADP needed to fulfill the requirements of the various agencies.

Essentially, all Federal agencies would lease equipment from the GSA revolving fund. So far as the agencies are concerned, only the budgetary personnel would know the difference. GSA would acquire the ADP systems selected by the management of the agencies. The agencies would use the equipment as long as they wished, in any manner they saw fit, subject to the general policy and fiscal control of the Bureau of the Budget, the President, and the Congress as normally applied to all agency operations.

In practice, GSA would bill the agencies periodically at rates reflecting the use value of the equipment with the aim that the fund break even at the end of each fiscal year. The agencies in turn would obtain annual appropriations to reimburse the revolving fund for the use of the equipment selected by and assigned to them. GSA could obtain direct appropriations covering all overhead expenses incident to operating the revolving fund, except that direct expenses incurred in operating multiagency centers would be prorated among the user agencies in their reimbursements. This is a matter, however, which the committee leaves to the discretion of the Appropriations Committees.

OTHER ADVANTAGES PROVIDED BY VOLUME PROCUREMENT

Aside from the establishment of a single purchaser concept and simplifying the interagency transfer of equipment, the coordination of equipment has a number of other advantages, two of which are of particular importance. First, this approach would provide an effective means for making essential lease versus purchase, evaluations on the basis of the benefit to the Government as a whole. Second, consolidated acquisition would allow the Government to purchase on a priority basis those ADP systems with the greatest purchase advantage.

LEASE VERSUS PURCHASE EVALUATIONS ON A GOVERNMENT-WIDE BASIS UNDER H.R. 4845

H.R. 4845 would provide an effective means for making essential "lease versus purchase" evaluations on the basis of the benefit to the Government as a whole. BOB Circular A–54 [45] issued in October

[45] Hearings on H.R. 4845, p. 286.

1961, provided that agencies should make ADP lease versus purchase evaluations in anticipation of equipment acquisition. The March 1963 GAO report recommended that lease versus purchase evaluations be made from the standpoint of the estimated useful life of the equipment to the Government as a whole rather than the estimated period of application of the initial user agency.

This estimate of economic useful life is an essential element in the lease versus purchase evaluation. Generally, it is the comparison of the projected lease payments over the period of useful life as compared with the purchase price and maintenance costs (less the equipment's residual value) that determines the comparative advantages of these two modes of acquisition. When the lease payments over the period of the estimated useful life exceed the purchase price and maintenance costs, this concept of evaluation indicates purchase is the most economical approach. The shorter the estimated period of useful life, the more likely the evaluation will favor the lease of equipment.

Ideally, competitive forces should push lease rates toward the cost of ownership (purchase price plus maintenance plus interest on capital investment) over the equipment's useful life. But conditions in the ADP industry are far from ideal. At present, the lease payments for most ADP components equal the cost of ownership in a relatively short period, seldom exceeding 45 to 50 months,[46] although the useful life of most ADP equipment is estimated at between 5 and 10 years.[47] In a recent study, the Department of Defense estimated that the lease payments on most ADP equipment equal the purchase price within 2½ to 4½ years.[48] Whatever the reasons may be and any justification that can be attached to them, ADP manufacturers in the case of most components are accelerating the amortization of the capital invested in leased equipment to the serious economic disadvantage of those leasing it for any extended period.

As a result, at this time agencies and others users leasing equipment pay out in a relatively short period in the form of lease payments an amount equivalent to a substantial portion of the purchase price. Thus, even in those instances where the initial acquiring agency does not foresee an estimated period of application of a duration sufficient for the projected lease payments to equal the purchase price, the Government should nevertheless evaluate the potential savings inherent in purchase. The additional investment in many cases would be a relatively minor portion of the purchase price. Weighed against the additional investment would be use of the equipment with only maintenance costs for the remainder of its useful life.

The GAO logically suggests that the estimated period of equipment application by the initial acquiring agency may not constitute a realistic estimate as to the economic useful life of the equipment to the Government as a whole. The Government has countless needs for ADP equipment of varying degrees of sophistication. Some of the most costly ADP with the greatest capacity and speed is used in defense, space, and intelligence. In these areas, there is a continuing need for the most advanced equipment. Yet throughout the Gov-

[46] Fortune, op. cit., p. 207.
[47] Financial Advantage of Purchasing Over Leasing, Comptroller General (March 1963), p. 15.
[48] Contract Support Service Project, Department of Defense, Project Staff Report (Mar. 31, 1965), p. 79.

ernment there are other agencies with less demanding requirements that can use this equipment on a secondary basis. Under these circumstances, it is wholly unrealistic for various agencies acquiring costly, highly sophisticated ADP systems to make the necessary lease versus purchase evaluations based upon estimated periods of application limited to their own requirements. The 1965 BOB study rejected the GAO recommendation on Government-wide lease versus purchase evaluation, and some agencies, notably the Defense Department, concurred. In the Department's report on H.R. 4845, the argument against Government-wide evaluations is stated as follows:

> It has been stated that a principal advantage of centralized procurement of ADPE is that lease/purchase decisions could be made on the basis of the total Government requirement for the equipment over its useful lifespan rather than on the basis of estimated use by the acquiring organization. The Department of Defense position, based upon extensive experience with this type of equipment, is that it is practically impossible for a single agency to determine potential secondary users within the agency at the time of initial acquisition and that it is completely unrealistic to assume that any agency can make such determinations for the Government as a whole.[49]

The GAO has never suggested that Government-wide evaluations depend upon the specific identity of secondary users and their requirements at the time of equipment acquisition. And, were the identity of secondary users essential, the Defense Department's arguments could preclude lease versus purchase evaluations based upon the projected Government-wide use of equipment. It is reasonable that competent officials fully cognizant of Government ADP inventories and applications and knowledgeable of the capacities of the various systems the Government acquires could on a sound, businesslike basis attribute secondary usage potential to certain selected systems which in their judgment have long-range utilization within the Government.

Several of the agencies, and particularly the Department of Defense, have expressed concern over the possibility of acquiring a large volume of excess Government-owned equipment with its accompanying administrative and storage expenses. However, there is no reason to anticipate such a problem. It is not the policy of the Government to store excess equipment for long periods of time, but to sell it as surplus in such a manner that the Government receives the fair market value of the property. Purchasing under these circumstances would be on a highly selective basis. In those instances when the Government did purchase a system, and no secondary utilization developed at the time it became excess to the initial using agency, the equipment would be relatively new and the residual value correspondingly high.

PRIORITY OF PURCHASE OF SYSTEMS WITH GREATEST PURCHASE ADVANTAGE UNDER CONSOLIDATED PROCUREMENT

Government ADP use is expected to increase indefinitely. Increasing billions in tax funds will be involved. It may not always be possible for the President and the Congress to allocate sufficient capital

[49] Hearings on H.R. 4845, pp. 546–547.

to the revolving fund to cover the purchase of all ADP systems which careful agency and Government-wide evaluations dictate should be purchased rather than leased. If the Government is to receive the most value for its dollar, those systems with the greatest purchase advantage to the Government as a whole should be purchased with the funds available. Budgetary considerations and funding problems in the various agencies should not preclude the Government from purchasing ADP equipment on a priority basis.

This problem was recognized in the 1965 BOB study and was discussed in connection with "Budget Considerations":

> Decisions with respect to the purchase or rental of a computer inevitably become involved in budget considerations. In most cases, budgets can be prepared or adjusted to accommodate either decision. In other cases, an administrator with limited funds available to perform his mission may find it undesirable to devote a substantial portion of his funds to a capital investment if doing so will force him to forego an essential element of his operating program. In these cases, the choice reflects a decision on whether the purchase of equipment will yield a return in the form of long-range savings that is greater than the return to be obtained by devoting the funds to another purpose. In Government—unlike most industries where similar judgments must be made—this decision often cannot be validated by agencies because the benefits resulting from public service functions usually can be measured only by value judgments. Although it is recognized that budget considerations may, at times, cause a temporary deferral of a decision to purchase, the circumstances should be fully documented to show justification for such action, and steps should be taken to effect the budget adjustments which would permit purchase as early as practicable.[50]

At this time an agency with budgetary problems may well have to postpone the purchase of ADP equipment. Yet, at the same time, another agency may acquire another system requiring a comparable outlay of capital in which the advantage of purchase over lease is substantially less. Under the present agency-by-agency approach, not only can individual agency budgetary problems arbitrarily interfere with the Government's purchase of equipment which lease versus purchase evaluations indicate should be purchased but, more important, there is no simple and effective means for the systematic purchase of that equipment which on a priority basis offers the Government as a whole the greatest purchase advantage. Under H.R. 4845 through the use of the revolving fund, GSA could very easily apply available ADP capital to the purchase of that equipment offering the highest purchase advantage.

G. H.R. 4845 Authorizes Exemptions and Permits GSA To Delegate Authority to Agencies in the Acquisition of Equipment

As previously discussed in this report, general-purpose ADP systems are made up of various combinations of mass-produced, commercially available components. It is these general-purpose, mass-produced,

[50] 1965 BOB ADP study, p. 32.

commercially available ADP components and the systems created from them that come within the confines of this legislation. Digital and analog components forming a part of tactical weapons or space systems which have no general-purpose applicability would be wholly excluded from this program. Procurement of this latter equipment would remain the complete responsibility of the Defense Department and other agencies that have requirements in these areas.

General-purpose, mass-produced, commercially available ADP components used in conjunction with specially designed components and as parts of systems with unique scientific, cryptological, or military applications of a strategic nature would also come within provisions of this legislation for acquisition, inventory control, and potential secondary usage although such components or systems might not be available for sharing. Generally, there is no justification for exempting such components simply because the equipment is initially applied to some highly specialized application or used under conditions which preclude sharing. Once the components selected by the agency are acquired by GSA, they would be turned over to the agency to be used in whatever specialized application the agency had planned with no further participation by GSA except inventory reports until the component becomes surplus.

Examples of equipment coming within this category would be the ADP used "in line" to control space vehicles in flight and the backup or redundant systems which must be available for this purpose. Also, equipment used in highly sensitive security work by agencies such as the Federal Bureau of Investigation and the Central Intelligence Agency (CIA), which offer no potential for sharing, could readily be acquired under a general Government acquisition program and used for other purposes when surplus to the initial acquiring agency.

Although the ADP to be included under this management program could be more closely defined at this time, the committee is concerned that rapidly shifting developments in the interrelated fields of defense, space, communications, and ADP could make any presently acceptable distinctions obsolete. And, as this legislation involves the internal operations of the Government, there is no pressing need for strict statutory definitions. As in keeping with the general concept of H.R. 4845, the specific definition of general-purpose ADP equipment is left to the BOB and GSA and the issuance of appropriate regulations.

EXEMPTION OF INDIVIDUAL SYSTEMS FOR REASONS OF NATIONAL SECURITY OR DEFENSE OR ECONOMY AND EFFICIENCY

As backup to avoid compromise of our national security or defense and to assure economy and efficiency, the Administrator of General Services is authorized to exempt individual systems from provisions of this program. It is of paramount importance that agencies with intelligence or secret responsibilities maintain their security in line with appropriate Federal statutes and as the President might direct under provisions of this bill.

EXEMPTION OF EQUIPMENT BY AGENCY HEADS

The Department of Defense strongly recommends that language be included in the bill affording the agency heads the discretion of exempting equipment from provisions of this management program.

The DOD's recommended amendment is in such broad terms as to permit the Department, in the discretion of the Secretary of Defense, to exclude all Defense Department ADP.[51] As the Comptroller General has so strongly recommended, any exclusion of an entire agency from this management program would be wholly inadvisable. Realistically, such discretion in agency heads might soon exclude all Government ADP which otherwise would come within this program.

In view of the authority extended the Administrator of GSA to exempt specific systems from the program for reasons of either national security and defense or economy and efficiency, the committee does not believe that any general exemption, such as the DOD recommends, would be appropriate. Furthermore, as expressly provided in the bill, should GSA make any decision which the user feels is adverse to his interests, the appropriate agency would have the right to appeal to the BOB, and, if the problem was of sufficient magnitude, to the White House. Under H.R. 4845, this entire management program would be under the express direction of the President. Exclusionary authority such as the DOD suggests is therefore unnecessary and inappropriate.

GRADUAL IMPLEMENTATION OF MANAGEMENT PROGRAM

Implementation of the coordinated ADP management program provided in H.R. 4845 would be gradual. Subsection 111(b)(2) expressly provides that the Administrator may delegate authority extended to him under provisions of this legislation to the extent he considers such action "necessary and desirable for the orderly implementation of a program for the utilization of such equipment." Utilizing this authority, the Administrator would implement this more effective management program on an orderly step-by-step basis so as to avoid the disastrous dislocations that would undoubtedly accompany any attempt to completely alter management of ADP overnight.

Upon approval of this program, an initial step would be to establish a comprehensive inventory system carefully designed by experts so that necessary recurring information needed for all levels of Government ADP management would become routinely available. Collateral to the establishment of this inventory, GSA would seek appropriations from Congress to set up the ADP revolving fund and work out with representatives of the various agencies the most acceptable methods by which the agencies would reimburse the fund for equipment use. After the revolving fund is established, GSA could provide for the transfer of presently held general purpose ADP components to the fund.

Once accurate, up-to-date information on available capacity and prospective requirements became available, a more advanced sharing program could be developed. Using ADP equipment, GSA could examine various sharing alternatives and fully exploit available, but unused, Government capacity in meeting the Government's requirements. Essentially, GSA, with adequate information, could place Government sharing under positive direction.

After the inventory system and the revolving fund have both been set up and other aspects of the program have been implemented, GSA would then begin to coordinate Government acquisitions to achieve a

[51] Hearings on H.R. 4845, pp. 179, 230–233.

larger volume of purchases and leases or combinations thereof. The savings inherent in this management program do not require compromise in the selection or the use of the equipment. If an agency has an unexpected need for ADP or if an agency deadline must be met, these delivery requirements must not be ignored to achieve greater volume acquisitions. However, if agencies keep GSA's inventory system fully apprised of future requirements through a system of long-range planning and forecasting this information can be used to coordinate and bring about volume acquisitions and more reasonable purchase and lease prices.

H. Conclusion

This legislation is essential to effective Government ADP management. Constituting a broad perimeter of authority to BOB, GSA, and the Department of Commerce, it provides the management techniques which have heretofore been lacking in Government ADP management. The bill emphasizes the need for adequate information in effective management and Government-wide coordination. The bill also recognizes the desperate need to improve the Government's bargaining position in equipment acquisition.

Numerous ADP management problems remain to be resolved. Although H.R. 4845 does not extend to agency equipment selection, everyone concerned agrees that there is a critical problem in this area. Equipment compatibility and "input and output" standardization must also be dealt with in substantive terms. They cannot be solved directly through legislation. But if the Government's ADP management is put in order through the establishment of this Government-wide coordinated management system, these other costly and difficult problems can be more easily isolated and resolved and the Government's use of ADP made more effective. At this time, most Government ADP applications fall within the more routine data processing capabilities of this equipment. The Government's checkbook is kept balanced through ADP, but ADP, though it has the potential, is not widely used in evaluating the most efficient manner in which Federal funds should be spent. During the years to come, ADP will be used more and more in the decisionmaking process and the Government ADP equipment costs will surpass any sum we can now imagine.

During the course of this committee's consideration of ADP legislation over the past 3 years, numerous agencies have been skeptical of the need for legislation as well as certain provisions of this particular bill. The committee does not expect this program to be implemented without difficulty. But the difficulties that might be met after passage of H.R. 4845 are much preferred over those which at this time and in years past unnecessarily cost the taxpayers hundreds of millions annually. Based upon two comprehensive BOB ADP management studies, about 100 General Accounting Office audit reports, and 3 years of active investigation by this committee, the time has come for Congress to take reasonable but effective action to assure the establishment of efficient ADP management in Government.

IV. COMMITTEE AMENDMENTS

The committee recommends the adoption of six amendments to H.R. 4845:

First, the language "or at the expense of" is deleted from subsection 111(a) of the bill on page 2, line 1, so as to exclude ADP equipment

needed to meet the requirements of Government contractors and others acquired at the Government's expense. For this purpose, the phrases "and other users", page 5, line 22, and "or user", page 6, line 1 are also stricken.

During the past 3 years the committee has received 29 General Accounting Office audit reports outlining serious deficiencies in the manner in which Government cost-type contractors acquire ADP equipment. The 1965 BOB study recommended that effective lease versus purchase evaluations be made regarding contractor equipment acquired at the Government's expense. On June 9, 1965, the Secretary of Defense approved a report recognizing that a serious problem existed in this area and recommended improvements in DOD management of this equipment.

Aerospace Industries Association of America, representing most Government contractors with ADP equipment that would be affected by this legislation, has expressed concern over the possible impact on their operations of extending this Government-wide inventory and acquisition coordinating system to ADP used in the fulfillment of space and defense contracts. For this reason, it is concluded that a more appropriate course of action at this time would be to provide for this management system limited to in-house Government ADP. As this new management system is implemented within the Government, the success of the recently announced improvements in the Defense Department management of contractor ADP equipment could be evaluated. It is the committee's intention to follow developments closely so that appropriate action can be recommended should developments indicate that inclusion of contractor equipment, acquired at the expense of the Government, under this coordinated Government inventory and acquisition system is needed for the protection of the taxpayers' interest.

Subsection 111(b)(1) provides that—

> * * * In carrying out his responsibilities under this section the Administrator is authorized to transfer automatic data processing equipment between Federal agencies, to require joint utilization of such equipment by two or more Federal agencies, and to establish and operate equipment pools and data processing centers for the use of two or more such agencies when necessary for its most efficient and effective utilization.

Authorizing the Administrator to "require" joint utilization of equipment as provided above might be interpreted to conflict with provisions in subsection 111(g) which provide that the Administrator of GSA shall have no authority to interfere with the determination by the agencies of their individual ADP equipment requirements. To forestall any possible contradictions in the subsections, the committee recommends that H.R. 4845 be amended to authorize the Administrator to "provide for" joint utilization of such equipment.

Another amendment would provide for a comprehensive annual report to Congress on the ADP management program established by this legislation. In addition to an account of receipts, disbursements, and transfers to miscellaneous receipts as required in subsection 111(c), the Administrator would be required to submit an annual report of "equipment inventory, utilization, and acquisitions."

The other amendment would provide a more specific meaning to the term "requirements" as used in subsection 111(g) of the bill. The amendment would add the phrase "including the development of specifications for and the selection of the types and configurations of the equipment needed" to the second sentence in subsection 111(g).

The Controller of the AEC strongly recommends this additional language as a clearer manifestation of the committee's intent that GSA not come between the manufacturer and the user in the determination of requirements or selection or use of equipment.

The committee's confidence in the Administrator of GSA is manifested in the broad authority extended him under this legislation. The committee is not concerned that H.R. 4845, without this amendment, would cause any disruption in user agency responsibilities in these areas. However, as the additional language fully reflects the committee's intent, it is recommended that this clarification as to what is meant by the term "requirements" be added to the bill. It should constitute a further assurance to the agencies that it is neither the purpose nor the intent of this legislation that their responsibilities in the selection and use of ADP equipment be compromised in any way.

V. SECTION-BY-SECTION ANALYSIS OF H.R. 4845

H.R. 4845 would add section 111 to the Federal Property and Administrative Services Act of 1949 (63 Stat. 377), extending responsibility to the Administrator of General Services, subject to overall direction by the President and fiscal and policy control by the Bureau of the Budget, for the economic and efficient purchase, lease, and utilization of automatic data processing equipment necessary to meet the requirements of the Federal Government. The proposed new section is divided into seven subsections. Subsections (a) and (b) provide the basic authority to be exercised by the Administrator of GSA. Subsection (c) authorizes the establishment of a revolving fund to finance the activities undertaken by the Administrator in pursuance of this authority. Subsection (d) provides for the administration of this fund, and subsection (e) prescribes that other provisions of law which are inconsistent with the provisions of this section shall not be applicable in the administration of this section. Subsection (f) authorizes the Secretary of Commerce to undertake necessary research and to provide scientific and technological advisory services relating to the use of automatic data processing in the Government. Subsection (g) provides that the authority conferred by this section shall be exercised subject to direction by the President and by the Bureau of the Budget.

Subsection (a) authorizes and directs the Administrator to coordinate and provide for the purchase, lease, and maintenance of automatic data processing equipment to meet the requirements of Federal agencies.

Subsection (b) authorizes the Administrator to provide automatic data processing equipment suitable for efficient and effective use by Federal agencies through purchase, lease, or transfer of equipment between Federal agencies, to provide for joint use of equipment by two or more agencies, and to establish and operate equipment pools and data processing centers when such action in his opinion is necessary for the economical and efficient utilization of such equipment on a Government-wide basis. The Administrator is also authorized to

provide for the maintenance and repair of such equipment by contract or otherwise.

Subsection (b) further allows the Administrator to delegate authority under this section to Federal agencies to lease, purchase, and maintain individual systems or specific units of equipment when, in his discretion, such action is either necessary for economy and efficiency of operations, or when such action is essential to national defense or security. Authority may also be delegated in such circumstances to an agency to operate ADP equipment pools and processing centers. Solely on an interim basis, the Administrator is further authorized to delegate authority on a general basis in his discretion to the extent necessary or desirable to allow for the orderly implementation of this coordinated Government-wide management program.

The term "Federal agency" as used in this section 111, is defined in the Federal Property Act to which H.R. 4845 is an amendment. The term extends to "any executive agency or any establishment in the legislative or judicial branch of the Government (except the Senate, the House of Representatives, and the Architect of the Capitol and any activities under his direction)."

Subsection (c) authorizes the establishment of an automatic data processing fund. This is to be a fund without fiscal year limitation to be used to finance expenses incident to the Government-wide data processing program provided for in this section. Such expenses include those incurred for personal services, purchases, rentals, maintenance and repair, and direct operation costs of ADP service centers, as well as other related costs. Following receipt of advice of agency requirements and appropriate evaluations as to the availability of currently held equipment, the Administrator would, when necessary, purchase equipment through use of capital in the fund, or if more advantageous, lease equipment through use of such funds.

To keep the capital of the revolving fund intact, the user agency would reimburse the Administrator for the use of the equipment on an annual or other periodic basis in sums as determined under subsection (d). Periodic payments would be made for regular, recurring services, and individual payments for specific intermittent services. User agencies would include in their budgets requests for funds necessary to meet these charges. However, to provide for the additional capital to cover equipment purchases during the period of initial implementation of the program, and to cover future increases in capital fund requirements (reflecting greater Government-wide utilization of such equipment), the Administrator would make requests in the budget of the General Services Administration for capital to be placed in the revolving fund.

The language of subsection (c) is sufficiently broad to include the cost of administration of the program if it appears at a later date that such costs should be paid from the revolving fund. However, in order to avoid confusion during the initial period of implementation of the program, the committee feels that such costs should at least temporarily be provided for by direct appropriation as is provided in subsection (d). Depending upon later developments, these costs would then be paid from direct appropriations or from the revolving fund at the discretion of the appropriations committees of Congress.

Subsection (c) further provides that a report of receipts, disbursements, and transfers from the fund shall be made annually in connection with the budget estimates to the Director of the Bureau of the Budget and to the Congress. Incident to these reports, general estimates of expected expenditures for the next fiscal year would be furnished the appropriations and other congressional committees upon request as a further assurance of congressional control and supervision of this program. Subsection (c) also contains a provision for the inclusion in appropriations acts of provisions regulating the operation of the ADP fund or limiting expenditures from the fund. The purpose of this provision is to assure that the appropriate control over the expenditure of funds by a Federal agency remains in the Congress.

Subsection (d) authorizes appropriations to the revolving fund in such amounts as may be required. It is further provided that sums so appropriated, together with the value of supplies and equipment transferred to the Administrator, shall constitute the capital of the fund. The fund is also to be credited with advances and reimbursements from appropriations and the payments of any agency, organization, or contractor utilizing or receiving services from equipment. Rates for use of the equipment or for services received therefrom are to be fixed by the Administrator so as to approximate the cost charged to the fund, including depreciation and accured leave, the amortization of installation costs, direct costs of operating service centers, as well as other items of expense recognized and acceptable from the standpoint of sound accounting practices. Prior to fiscal year 1967, it is contemplated that appropriations will be provided for certain direct operating costs. Provision is made in subsection (d) to avoid inclusion of such items in the determination of the rates charged user agencies. The indirect administrative costs of operating the fund would in later years be included in rates charged the user agencies only if the congressional appropriations committees determine that such costs should be paid out of the revolving fund as provided in subsection (c).

Finally, refunds or recoveries resulting from operations, such as net proceeds of disposal of fund property as excess or surplus and moneys received in settlement of loss or damage claims, are to be credited to the fund. After the close of each fiscal year net income not required to offset prior year losses is to be transferred to the Treasury as miscellaneous receipts.

Subsection (e) provides for the inapplicability of other provisions of law which otherwise would limit the authority of the Administrator under this proposed amendment to the Federal Property and Administrative Services Act of 1949, and specifically, the proviso following paragraph (4), section 201(a) of that act extending certain authority to the Secretary of Defense to exempt the National Military Establishment from provisions of the Property Act, as well as provisions of section 602 (d) of this act granting exemptions to the Atomic Energy Commission, TVA, and others.

The Secretary of Commerce is authorized in subsection (f) to provide scientific and technological advisory services relating to ADP to the agencies and particularly to the Administrator of General

Services in exercising the authority delegated in this legislation. The Secretary of Commerce is further authorized to make recommendations to the President relating to the establishment of uniform Federal ADP standards. This subsection also delineates the authority of the Secretary of Commerce to undertake research in the sciences and technologies of automatic data processing systems. It is not intended that activities carried out under this authority duplicate or preclude research being done by other Government agencies or private industry.

Subsection (g) provides that the authority conferred upon both the Administrator of General Services and the Secretary of Commerce by this amendment shall be exercised subject to direction by the President and to fiscal and policy control by the Bureau of the Budget. The Administrator is specifically precluded from impairing or interfering with the determinations by the agencies of their ADP requirements. Under this program the user would develop the specifications for and select the type and configuration of equipment needed. The Administrator would then procure the selected equipment and supply it to the users. The Administrator is further precluded from interfering with or attempting to control in any way the use of equipment or components furnished to the agencies out of the fund. The Administrator is required to give adequate notice to all agencies and other users of any proposed determination specifically affecting them or equipment used by them. If the user concerned and the Administrator fail to agree on the proposed determination, the issue shall be subject to review and decision by the Bureau of the Budget, or as the President may otherwise direct.

VI. AGENCY REPORTS ON H.R. 4845

(The agency reports and comments received on H.R. 4845 follow:)

COMPTROLLER GENERAL OF THE UNITED STATES,
Washington, D. C., March 22, 1965.

Hon. WILLIAM L. DAWSON:
Chairman, Committee on Government Operations,
House of Representatives.

DEAR MR. CHAIRMAN: Reference is made to your letter of February 19, 1965, and letter of February 26, 1965, from the chairman of your Government Activities Subcommittee requesting our comments on H.R. 4845. This bill would provide for the economic and efficient purchase, lease, maintenance, operation, and utilization of automatic data processing equipment by, or at the expense of, Federal departments and agencies.

In our letter to you of May 15, 1963 (B–151204), we submitted our views regarding H.R. 5171, 88th Congress, a similar bill to H.R. 4845, 89th Congress. Also by letter of August 4, 1964, we made a report to the chairman of the Senate Committee on Government Operations on a proposed amendment of H.R. 5171 in the nature of a substitute that was prepared in an effort to meet objections of the Federal agencies to the provisions of H.R. 5171 as passed by the House of Representatives. In our comments on H.R. 5171 and the amendment to H.R. 5171, we expressed the belief that enactment of the bill would be in the interest of the Government and would result in considerably more

economical procurement and utilization of automatic data processing equipment.

In commenting on H.R. 5171 and on the proposed amendment in the nature of a substitute for H.R. 5171, we included the following statement which we feel reflects our views on this matter:

"In our report to the Congress dated March 6, 1963 (B–115369), on the 'Financial Advantages of Purchasing over Leasing of Electronic Data Processing Equipment in the Federal Government,' we pointed out that there is need in the Federal Government for an effective mechanism to coordinate and control the purchase, lease, maintenance, and utilization of EDP equipment. Accordingly, we recommend to the President of the United States that he establish such an office in his organization. We are of the opinion that overall policy guidance and direction of the Government's data processing programs can be most effectively accomplished through the efforts of a small, highly placed central management office in the executive branch of the Government. However, we recognize that there are various ways in which central control can be exercised over the procurement and utilization of this type of equipment. H.R. 5171 provides such an alternate method. We are not opposed to the method set forth in H.R. 5171; however, we feel that the mechanism proposed in H.R. 5171 for carrying out the detailed operations of coordination and control needs to be subject to the policy guidance and overall direction of the Office of the President."

We note that the proposed bill, H.R. 4845, provides in paragraph (g) that the authority conferred upon the Administrator and the Secretary of Commerce by this legislation shall be exercised subject to direction by the President and to fiscal and policy control exercised by the Bureau of the Budget.

In our report to the Congress dated April 30, 1964 (B–115369), on the "Review of Problems Relating to Management and Administration of Electronic Data Processing Systems in the Federal Government," we reviewed several problems pertaining to the management of EDP systems in the Federal Government. We commented that these problems have arisen largely because of the decentralized system of management used whereby each using agency makes its own decisions on the procurement and utilization of EDP equipment without regard to the economies available from considering overall Government needs. We further commented that our review of these problems and the manner in which they can be resolved to the maximum financial advantage of the Federal Government has reinforced our earlier conclusion that an effective central management organization with appropriate authority and responsibility is needed to exercise control over the procurement and use of data processing facilities and related costs being incurred by the Government.

In addition to our March 6, 1963, and April 30, 1964, Government-wide reports, we have issued 64 reports to the Congress covering reviews made of selected aspects of individual agency or Government contractor automatic data processing systems. These reports have contained numerous examples of deficient management of automatic data processing equipment and of potential savings through more effective and centralized management of these facilities.

With reference to the policies and procedures set forth in the bill, we offer the following comments for consideration:

1. We suggest that the following sentence in subsection 111(g), pages 5 and 6, be deleted: "The Administrator shall not interfere with, or attempt to control in any way, the use made of automatic data processing equipment or components thereof by any agency or user."

This provision would place undue restrictions on the Administrator of General Services which would preclude the attainment of the most effective and economical procurement and use of automatic data processing equipment. We believe that this provision conflicts with other authorities granted the Administrator.

Furthermore, we believe that this provision could negate the authority granted in section 111(b)(1) to the Administrator to require joint utilization of automatic data processing equipment by two or more agencies or to establish and operate equipment pools and data processing centers for the use of two or more agencies if those agencies are unwilling to operate in such manner.

2. The bill provides that a report of receipts, disbursements, and transfers to miscellaneous receipts relating to the automatic data processing funds be made annually to the Director of the Bureau of the Budget and to the Congress. The type of report called for is somewhat limited and we would recommend that the bill require a more complete financial report. Accordingly, we suggest that the words "a report of receipts, disbursements, and transfers to miscellaneous receipts, under this authorization" be deleted and the following substituted: "appropriate reports on the financial operations of the fund in accordance with the regularly established requirements of the Bureau of the Budget."

3. We suggest that the bill provide that, after a date determined upon, based on recommendation of the Administrator, existing appropriations and, unless specifically so provided, future appropriations of the agencies concerned, other than appropriations to the fund, shall not be available for the purchase or lease of automatic data processing equipment of the types taken over by the Administrator or for obtaining similar automatic data processing services by contract.

4. We note the term "organization" appearing on page 4, lines 5 and 6 of the bill. If by use of this term it be intended to authorize the Administrator to make equipment available for, or otherwise supply services to, private organizations, which would constitute an exception to section 3678, Revised Statutes, 31 U.S.C. 628, requiring the application of appropriations solely to the objects for which made and no other, in the absence of specific authority to the contrary, then adding the word "private" before the word "organization" would obviate any doubt in the matter.

5. We suggest that a provision be added to the bill to provide that no executive agency shall be exempt from the provisions of the bill except under extraordinary circumstances.

6. With regard to the applicability of this legislation to Government contractors, we understand the reference on page 2 of the bill, "or at the expense of, Federal agencies" is intended to extend authority of the Administrator over contractor equipment under negotiated contracts.

We have taken the position that, to the maximum extent practicable, data processing equipment or systems required by contractors in the performance of negotiated contracts with the Federal agencies, where the whole or a substantial part of the cost of such equipment or systems would become a part of Government contract prices, should be furnished by the Government with title or leasehold interest remaining in the Government subject substantially to the same laws and regulations applicable to in-house Government equipment.

We believe the enactment of the bill would be in the interest of the Government and will result in considerably more economical procurement and utilization of electronic data processing equipment. Therefore, and subject to the changes suggested above, we favor enactment of the proposed legislation.

We will be available to testify at the proposed hearings and we will be pleased to assist the committee in any respect with regard to this matter.

Sincerely yours,

JOSEPH CAMPBELL, *Comptroller General.*

EXECUTIVE OFFICE OF THE PRESIDENT,
BUREAU OF THE BUDGET,
Washington, D.C., March 11, 1965.

HON. WILLIAM L. DAWSON,
Chairman, Committee on Government Operations,
House of Representatives,
Washington, D.C.

DEAR MR. CHAIRMAN: This will acknowledge your letter of February 19, 1965, inviting the Bureau of the Budget to comment on H.R. 4845, a bill to provide for the economic and efficient purchase, lease, maintenance, operation, and utilization of automatic data-processing equipment by the Federal departments and agencies.

President Johnson transmitted to the Congress on March 2, 1965, a report on Federal policy and practices in the acquisition and utilization of electronic computers in Government. The report, prepared by the Bureau of the Budget, is based on the results of a year-long study. It proposes a broad program to achieve increased effectiveness, coupled with greater economy, in the expanding use of automatic data-processing equipment. In a letter transmitting the report to the Congress, the President indicated that the policies and suggestions for improvement outlined in the report had his approval.

Under the policies approved by the President, agency heads are held responsible for taking necessary actions to assure the most efficient and economic administration and management of their ADP activities. Within that framework of responsibility, the President expects the central agencies—the Bureau of the Budget, the General Services Administration, and the Civil Service Commission—to develop policies and guidelines for the improved management and utilization of ADP and to exercise leadership in promoting interagency cooperation, coordination, sharing arrangements, and other measures to assure that the Government's ADP requirements are met effectively and at minimum cost.

To carry out the recommendation made in the Bureau's report, no significant changes would be required in existing organizational arrangements or in the assignment of responsibilities to the Bureau of the Budget, General Services Administration, Civil Service Commission, Department of Commerce, or the departments and agencies. We believe, however, that there is a clear need to strengthen the resources devoted to the management of automatic data processing within both the central agencies and the line departments. In addition, enactment of legislation specifically addressed to the management of automatic data processing in the executive branch of the Federal Government is considered desirable to reinforce and amplify the broad general authorities now vested in the Bureau of the Budget, General Services Administration, and the Department of Commerce. The report concludes that the lack of specific legislation now "creates unnecessary handicaps to the most effective management of ADP."

Accordingly, the report recommends the enactment of general legislation (1) providing an expression of congressional policy on the acquisition and use of ADP equipment, and (2) giving a specific directive to the Bureau of the Budget and the General Services Administration, within the areas of their presently assigned responsibilities, to take necessary actions to assure the most economic and effective use of ADP. The report also recommends that explicit legislative authority be provided (1) for the establishment of a revolving fund to facilitate the establishment of service centers, equipment pools, and time-sharing arrangements, (2) to provide authority to develop, measure, test, and make provision for the approval and implementation of Federal standards for ADP equipment and techniques and Federal standard data elements and codes, and (3) to provide specific authority and direction to the Secretary of Commerce to establish a centralized research center on computer sciences and technology and to provide advisory and consultative services to Government agencies on computer systems development and related scientific and technical problems.

It is the view of the Bureau of the Budget that enactment of H.R. 4845 would assist materially in carrying out the policies and suggestions for improving the acquisition and utilization of electronic computers which have been approved by the President. Accordingly, the Bureau of the Budget recommends that your committee give favorable consideration to H.R. 4845.

Sincerely yours,

PHILLIP S. HUGHES,
Assistant Director for Legislative Reference.

GENERAL SERVICES ADMINISTRATION,
Washington, D.C., March 15, 1965.

Hon. WILLIAM L. DAWSON,
Chairman, Committee on Government Operations,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: Your letter of February 19, 1965, requested the views of the General Services Administration on H.R. 4845, 89th Congress, a bill to provide for the economic and efficient purchase,

lease, maintenance, operation, and utilization of automatic data processing equipment by Federal departments and agencies.

The bill would add a new section 111 to title 1 of the Federal Property and Administrative Services Act of 1949, 63 Stat. 377, as amended, which would centralize GSA control over all electronic data processing equipment required by Federal agencies. Financing would be provided by a revolving fund established by the section. Original capitalization of the fund would be by appropriation and transfer of assets, which would be reimbursed through user charges.

The bill would provide legislation needed to supplement existing statutory authorities, remove any doubt as to the authority for functions presently being performed, and provide a clear statement of congressional policy respecting ADP matters.

General Services Administration endorses the views set forth in the letter of March 11, 1965, from the Director, Bureau of the Budget, to the chairman, House Committee on Government Operations, in support of H.R. 4845.

Accordingly, the General Services Administration recommends that your committee give favorable consideration to H.R. 4845.

The Bureau of the Budget advises that, from the standpoint of the administration's program, there is no objection to the submission of this report to your committee.

Sincerely yours,

ROBERT T. GRIFFIN,
Acting Administrator.

THE SECRETARY OF DEFENSE,
Washington, D.C., March 18, 1965.

Hon. WILLIAM L. DAWSON,
Chairman, Committee on Government Operations,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: Reference is made to your request for the views of the Department of Defense on H.R. 4845, 89th Congress, a bill to provide for the economic and efficient purchase, lease, maintenance, operation, and utilization of automatic data processing equipment by Federal departments and agencies.

The Department of Defense concurs in the desirability of setting forth in legislation an expression of policy by the Congress on the acquisition and use of automatic data processing equipment by Federal agencies. Such an expression of policy by the Congress would be of assistance to the Bureau of the Budget and the General Services Administration in coordinating the management of ADPE throughout the Government.

As you know, the Bureau of the Budget and the General Services Administration have already initiated actions which should materially improve the management of ADPE. A Government-wide reutilization program has been initiated within the last year which has been implemented throughout the Department of Defense. Under guidance provided by the Bureau of the Budget, ADPE sharing exchanges are being established by the General Services Administration and these actions are being fully supported by the Department of Defense. Recently, the Bureau of the Budget issued Circular A-71

which is designed to further improve the management of ADPE within the Government and which specifically identifies the responsibilities of all agencies in this regard. This circular is intended to implement recommendations contained in the Bureau of the Budget Report to the President on the Management of Automatic Data Processing in the Federal Government which the President approved and transmitted to the Congress on March 2, 1965.

The Bureau of the Budget Report expressed certain conclusion on the matter of procurement and use of automatic data processing equipment. It recommended that Government agencies retain their present responsibilities for making decisions in this area, rather than have a separate central office empowered with authority to make these decisions. The latter course, the report concluded, will dilute the responsibility of agency heads for the management of their organizations and automated systems; and would serve to divorce ADP management from the arrangements established by Bureau of the Budget Circular A–71 with respect to Presidential surveillance over the overall management of the executive branch. It would also interfere with direct Government agency-contractor relationships.

With respect to the establishment of a centralized revolving fund for the acquisition and utilization of ADPE, the Bureau of the Budget report, as approved by the President, limited its recommendations on the use of such a fund to those situations involving the establishment of service centers, equipment pools, and time-sharing arrangements or where it would be advantageous for appropriate Federal agencies on a permissive basis to finance the acquisition and utilization of ADPE.

There is contained in H.R. 4845 certain language which might be construed to require, on a mandatory basis, Federal agencies and their contractors to obtain their individual ADPE requirements through the Administrator of General Services. The Administrator would purchase, lease, or transfer from other Federal agencies the equipment to meet these requirements. Exceptions would be permitted only at the discretion of the Administrator. Regardless of which agency procured the equipment, the bill could be interpreted to require the use of the centralized revolving fund provided for in subsection 111(c) in all cases.

Use of such a fund on a mandatory basis would result in imposing another step in the procurement of ADPE. Moreover, there would be extra costs to Federal agencies resulting from surcharges necessary to reimburse the General Services Administration for costs of operating the fund. In addition, it could discourage second and third users of the equipment since they would be paying rentals to General Services Administration for older and perhaps less efficient equipment that might be as high or higher than what they would pay for the most modern equipment. Under existing procedures for the utilization of equipment excess to one agency by another agency, there is a clear financial incentive to utilize such equipment. If it is Government-owned, it can generally be acquired at no cost except for transportation, packing, and dismantling charges. If the equipment will do the job, the economic advantage over new equipment is obvious. Even with leased equipment, the agency can usually obtain it at a substantial discount from the new price. Since the General Services Administration could charge rentals as long as the equipment is in use (and would

have to until it is amortized), the incentive to use older, perhaps outmoded, equipment is lost. The General Services Administration may then find itself eventually in the position of having a large inventory of unused equipment in warehouses or directing agencies to use this equipment even though newer, more efficient equipment is available at equal or lower cost. For the above reasons, the Department of Defense does not consider the establishment of a revolving fund for acquisition of all ADPE as desirable.

The views of this Department with respect to ADPE in the hands of Government contractors have been made known to the Bureau of the Budget, the General Accounting Office, and to various committees of Congress. The General Accounting Office has issued a series of reports on this matter, favoring Government ownership for ADPE in Government contractor plants. Detailed comment to the Comptroller General on his recommendations in this area were supplied to him on May 21, 1964, a copy of which is attached.

Department of Defense procurement policy is to place maximum responsibility on contractors for contract performance, including the responsibility for facilities acquisition to perform those contracts. This would include ADPE. The Department's policies of contractor responsibility go hand in hand with increased emphasis on the use of fixed-price contracts and contracts with wide-ranging incentives which are designed to insure the utmost in sound contract management by Government contractors. Acceptance of a principle which would provide all ADPE to contractors as Government-furnished equipment carries with it substantial penalty because (1) it represents increased Government control and intervention in private enterprise and management initiative; (2) it poses the extreme likelihood of the creation of a substantial inventory of idle ADPE; (3) the administration and caretaking of such an equipment inventory will be extremely costly; and (4) it overlooks the alternative that the contractor can purchase ADPE in many cases with better advantages to the Government.

It has been stated that a principal advantage of centralized procurement of ADPE is that lease/purchase decisions could be made on the basis of the total Government requirement for the equipment over its useful lifespan rather than on the basis of estimated use by the acquiring organization. The Department of Defense position, based upon extensive experience with this type of equipment, is that it is practically impossible for a single agency to determine potential secondary users within the agency at the time of initial acquisition and that it is completely unrealistic to assume that any agency can make such determinations for the Government as a whole. We are in full support of the objectives of purchasing computers on the basis of proven economic advantage over leasing for the known application of the equipment. Lease/purchase analysis is made when the equipment is acquired and continually thereafter if the equipment is leased to assure that changed situations have not altered the original decision. The Department now purchases in all cases where the economic advantage is proven, based upon the known use of the equipment and if the funds are available. The equipment is then assured of full amortization by the initial requiring agency and, as previously mentioned, reutilization of the equipment by a secondary user is helped by an ability

to transfer the equipment at no cost. This procedure allows selected purchase of equipment where economy is assured and facilitates its reutilization, but at the same time prevents a costly buildup of owned equipment which may or may not have further use to the Government.

In view of the foregoing, it is recommended that in line 8, page 1 of the bill, the words "and provide for" be deleted; in line 4, page 2, the word "shall" be changed to "may"; in line 7, page 2, the words "and directed" be deleted; in line 12, page 2, the word "require" be changed to "provide for"; and in lines 13, 14, and 15, page 3, the words "for the efficient coordination, operation, utilization of such equipment by and for the Federal agencies" be deleted and substitute in lieu thereof the words "to establish and operate equipment pools and data processing centers by or for the use of two or more Federal agencies or to finance at the request of a Federal agency the acquisition and utilization of such equipment."

The chairman of the Subcommittee on Government Activities in his statement on the floor of the House of Representatives on February 11, 1965 (p. 2586, Congressional Record), at the time H.R. 4845 was introduced, stated that the bill contained exceptions necessary for reasons of security and defense and that it was not intended that the legislation cover any specialized scientific or specially designed military APD system components.

Virtually all specially designed ADPE developed for military purposes such as weapons fire control, tactical military field operations, scientific and engineering, missile and satellite tracking, weapons development, command and control, and communications operations are procured as integral parts of weapons and support systems. It should be further noted that commercial general purpose equipment is selected for these systems when it can perform satisfactorily. Selection of specific equipment, however, must always be related to the total system and its interface requirements. The Department of Defense also makes extensive use of ADPE for intelligence and other highly classified purposes. Information essential to the selection and acquisition of this equipment is highly classified and its dissemination restricted accordingly. Certain agencies of the Department of Defense make extensive use of ADPE in accomplishing urgent cryptologic missions. Design or selection, production, testing, and updating of ADP equipment and the urgency and sensitive classified nature of the data to which the ADP applications are made require that the most rigid security measures and time schedules be applied. It is considered essential that determinations with respect to ADPE of the types described above involving the national defense and national security be made by the Secretary of Defense. Accordingly, the following additional amendment is recommended for incorporation in the bill commencing on page 2, line 16:

"This section shall not be construed to apply to specially designed automatic data processing equipment for scientific, military or cryptologic uses and the head of a Federal agency is authorized to determine when any automatic data processing equipment should be excluded from the provisions of this section for reasons of national defense or national security."

In conclusion, the Department of Defense supports the enactment of H.R. 4845 if it is amended to include the suggestions set forth

above. It concurs in those provisions of H.R. 4845 pertaining to responsibilities to be vested in the Secretary of Commerce. The Department of Defense is engaged in extensive scientific research and development activities in the ADPE field primarily with respect to our military requirements. However, it believes that there is a definite requirement on a Government-wide basis for the type of services which the Secretary of Commerce would provide under this bill. It is understood that the authority vested in the Secretary of Commerce by subsection 111(f) is not intended to curtail or restrict Department of Defense research and development activities in this field.

We will be happy to provide any further information that your committee may request. Further, the Department welcomes the opportunity to testify at hearings to be held on H.R. 4845.

The Bureau of the Budget advises that from the standpoint of the administration's program, there is no objection to the submission of this report to the committee.

Sincerely,

CYRUS R. VANCE,
Deputy Secretary of Defense.

OFFICE OF THE POSTMASTER GENERAL,
Washington, D.C., March 29, 1965.

Hon. WILLIAM L. DAWSON,
Chairman, Committee on Government Operations,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: This is in reply to your request for a report on H.R. 4845, to provide for the economic and efficient purchase, lease, maintenance, operation, and utilization of automatic data processing equipment by Federal departments and agencies.

The Post Office Department is already accomplishing many of the purposes of this legislation. During the past year, ADP activities of our 15 regional offices have been consolidated into 6 data processing centers, which resulted in an increased utilization of equipment, and an estimated cost reduction of over $3 million a year.

We have actively participated in the Bureau of the Budget's experimental ADP sharing program in Philadelphia, where a member of the Department's regional office staff served as chairman of the regional sharing program. Since the completion of this experiment we have taken advantage, as far as possible, of equipment sharing opportunities.

In 1964, for example, the Department arranged to use the Treasury Department's larger capacity computer for sorting employee earnings records of a quarterly basis to meet Internal Revenue requirements. This arrangement provided measurable time and financial advantage to both Departments. Sharing has also been advantageous in the audit of postal money orders. The Treasury Department now performs the reconciliation function on a joint-use arrangement utilizing their equipment. This is saving the Post Office Department an outlay of over $500,000 a year.

It is noted that section 111(b)(2) provides that the Administrator of General Services may delegate to an agency authority to lease,

purchase, or maintain individual ADP systems or specific units of equipment when he determines such action to be necessary for economy and efficiency of operations. He may also delegate to an agency authority to lease, purchase, or maintain ADP equipment "to the extent to which he determines such action to be necessary and desirable to allow for the orderly implementation of a program for the utilization of such equipment." With respect to these provisions, it is our belief that management decisions as to when and where ADP will be used are the prerogative of the agency concerned. More importantly, we believe that the General Services Administration does not have the expertise to make judgments respecting complicated postal operations, or the relationship of ADP equipment to such operations, in terms of efficiency and economy.

Looking to the future, it is evident that ADP will become increasingly important to us in our day-to-day operations in various phases of the handling and transportation of mail as well as in the management. Through the use of a comprehensive data-gathering network, we anticipate that sectional center workload forecasts will in time be provided for use by postal managers in planning more precisely transportation and manpower requirements. Air and surface transportation schemes are in the process of being developed automatically with a view to optimizing transportation routings in terms of time and cost. We have an experimental project presently underway which indicates the practicability of developing essential management information in such areas as production scheduling and work measurement, with payroll data being obtained as a byproduct from the overall process. Our research and development efforts involve the use of ADP and related equipment as control components for mail processing transport equipment.

We are actively studying and testing a variety of new applications of ADP involving mail processing operations on workroom floors. Until these applications have been designed, developed, tested, and proved, the kind of equipment needed, the number of installations, and the location of equipment cannot be determined. Here, as in the other areas outlined above, the expertise of postal engineers is required for efficient procurement, operation, and maintenance of ADP equipment.

Computer technology, as we know it today, is advancing at a rapid rate, and it is reported that computer equipment becomes obsolete in 40 months or less. With this in mind, and with the General Services Administration passing on our requests for ADP, it can reasonably be assumed that delay will necessarily result in the acquisition and cause increase in procurement leadtime. Such delay can be lengthy and result in reducing the value of the equipment being acquired.

The Department agrees with the general design of the legislation to achieve a program of greater economy and increased effectiveness in the use of ADP equipment. The proposed sharing arrangements in the utilization of such ADP equipment, as recommended by the President, we believe will contribute greatly in meeting Government-wide ADP requirements at minimum cost, and help to establish commendable guidelines in ADP administration-management activities. We are mindful, however, that the Post Office Department must operate within a framework of responsibility requiring a day-to-day

method of operation, which in many respects differs from other agencies, and requires different operational procedures. It is hoped, therefore, that while we are in accord with the overall Federal policy intended, restrictive requirements will not be employed which would hamper or delay our normal activities.

In this connection we feel clarification should be made as to subsection (b) of the legislation which authorizes the General Services Administrator to make determinations and to require transfers and joint utilizations of ADP equipment by the agencies. The extent of this authority is not clear when read with the language of subsection (g) of the bill which restricts the authority of the General Services Administration where it impairs or interferes with agency determinations.

The Bureau of the Budget has advised that from the standpoint of the administration's program there is no objection to the submission of this report to the committee.

Sincerely yours,

JOHN A. GRONOUSKI,
Postmaster General.

DEPARTMENT OF AGRICULTURE,
Washington, D.C., March 15, 1965.

Hon. WILLIAM L. DAWSON,
Chairman, Committee on Government Operations,
House of Representatives.

DEAR MR. CHAIRMAN: This is in reply to your request of February 19, 1965, for a report on H.R. 4845, a bill to provide for the economic and efficient purchase, lease, maintenance, operation, and utilization of automatic data processing equipment by Federal departments and agencies.

In the Department of Agriculture significant improvements have been made in our program operations by using automatic data processing equipment. We feel that the Department's policies in the acquisition and use of automatic data processing equipment are in accordance with the objectives of H.R. 4845. We have computers of four manufacturers installed or on order. Three departmental data processing centers are now using large computers. Digital and analog computers are used as research tools in our laboratories. Small and medium computers are used where the workload warrants. A Department staff provides overall leadership and coordination of Department-wide activities pertaining to the management and use of automatic data processing equipment.

Section 111(g) of the proposed legislation relates specifically to the relationship of the General Services Administration to the agencies and other users of automatic data processing equipment. The report on the management of automatic data processing in the Federal Government, which was transmitted by the President to the Congress on March 2, 1965, contained the following recommendation:

"In summary, we have concluded that the establishment of a separate office empowered with authority and responsibility to make decisions on the procurement and utilization of ADP equipment would dilute the responsibility of agency heads for the management of their organizations, that it would serve to divorce ADP management from the

established arrangements for Presidential surveillance over the overall management of the executive branch, and that it would interfere with direct Government agency-contractor relationships unnecessarily."

We feel that this affirmative statement of policy clarifies the intent of this section.

The Bureau of the Budget issued Circular No. A–71 on March 6, 1965, assigning appropriate responsiiblity for the administration and management off automatic data processing activities to the Bureau of the Budget, General Services Administration, Department of Commerce, Civil Service Commission, and to the heads of executive agencies. This specific assignment of responsibilities to executive agencies should facilitatte the efficient and economical management of ADP activities.

We believe that H.R. 4845 will facilitate our efforts to achieve further economies, particularly by the additional services to be available from the Bureau of the Budget, the General Service Administration, and the Department of Commerce and the provisions for the automatic data processing fund for the procurement of automatic data processing equipment. Accordingly, the Department of Agriculture recommends that your committee give favorable consideration to H.R. 4845.

The Bureau of the Budget advises that there is no objection to the presentation of this report from the standpoint of the administration's program.

Sincerely yours,

ORVILLE L. FREEMAN,
Secretary.

THE GENERAL COUNSEL OF THE TREASURY,
Washington, D.C., March 12, 1965.

Hon. WILLIAM L. DAWSON,
Chairman, Committee on Government Operations,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: Reference is made to your request for the views of this Department on H.R. 4845, to provide for the economic and efficient purchase, lease, maintenance, operation, and utilization of automatic data processing equipment by Federal departments and agencies.

The proposed legislation would authorize the Administrator of the General Services Administration to coordinate and provide for purchase, lease, maintenance, and transfer of automatic data processing equipment; to require joint utilization of such equipment; to establish and operate equipment pools and data processing centers; and to delegate such authority to other Federal agencies. It would also provide for establishment of automatic data processing funds, authorize the Secretary of Commerce to provide scientific and technological advice on and to recommend standards for automatic data processing, and place certain limits on the authority of the Administrator and Secretary in carrying out its provisions.

The Treasury Department supports the underlying objectives of the proposed legislatiion. While much can be accomplished in the economic and efficient use of automatic data processing equipment and techniques within the framework of existing legislation, regulations, and

administrative arrangements, there may be certain advantages to be gained in the enactment of legislation dealing with this significant, and relatively new, management resource.

Some portions of the proposed legislation, however, may need clarification. H.R. 4845 would add to the Federal Property and Administrative Services Act of 1949, as amended, a new section 111 of which subsection (b)(1) states in part that "Automatic data processing equipment suitable for * * * use by Federal agencies shall be provided by the Administrator through * * * transfer of equipment from other Federal agencies * * *." The Department interprets this provision to mean that equipment so transferred would have first been declared excess by the using agency and thereby preclude possible interference with the ability of the using agency to carry out its program responsibilities.

Subsection (b)(1) would also provide that the Administrator is authorized "to *require* joint utilization of such equipment by two or more Federal agencies." This provision is in apparent conflict with the provision of subsection (g) of section 111 which would provide that "Authority so conferred upon the Administrator shall not be so construed as to impair or interfere with the *determination by agencies* and other users of their individual automatic data processing equipment requirements." [Italic supplied.]

The Department suggests that the language "to *facilitate* joint utilization" would be preferable and would preclude a possible misinterpretation leading to interference with an agency's responsibility to give priority to its assigned programs.

Subsection (b)(2) of section 111 would provide that "the Administrator may delegate to one or more Federal agencies authority to operate automatic data processing equipment pools and automatic data processing centers * * *." The Department considers that it is the intent of this provision to enable establishment of such pools and centers for use by two or more agencies under conditions not heretofore authorized by law.

The Department further believes that subsection (b)(2) of section 111, along with the provision in the last sentence in subsection (e), should not be so construed as to preclude the operation by the head of an agency of pools or centers now in existence or to be established within an agency under existing or future law. A contrary construction would seem to be inconsistent with that part of subsection (g) which provides "the Administrator shall not interfere with, or attempt to control in any way, the use made of automatic data processing equipment or components thereof by any agency or user."

Subsection (b)(2) would also provide that the "Administrator may delegate to one or more Federal agencies authority to * * * lease, purchase, or maintain individual automatic data processing systems or specific units of equipment * * *" under various conditions. The Department, under present practice, first attempts to acquire the automatic data processing equipment it has determined is needed, and for which funds have been provided by law, either under the provisions of Federal supply contracts the General Services Administration has negotiated with commercial suppliers or from the excess equipment of other Federal agencies, whichever is the most advantageous. Other sources are not used unless either a contract is not already available

for the equipment needed or the equipment available under existing contracts can be obtained more economically by negotiating a separate contract. Assuming that the provision cited above can be construed to confirm this practice, the Department would have no objection.

Subsections (c) and (d) of section 111 would establish an "automatic data processing fund, which shall be available without fiscal year limitation for expenses, including personal services, other costs, and the procurement by lease, purchase, transfer, or otherwise of equipment, maintenance, and repair of such equipment by contract or otherwise, necessary for the efficient coordination, operation, utilization of such equipment by and for Federal agencies * * *."

The intent of this provision is not fully clear to the Department which believes that the existing provisions of the Federal Property and Administrative Services Act of 1949, as amended, already authorizes a fund which the Administrator of General Services may use to procure and maintain equipment for the use of executive agencies in the proper discharge of their responsibilities.

It is assumed, however, that the proposed fund would additionally provide for the funding of necessary automatic data processing centers as proposed in subsections (b)(1) and (b)(2), discussed above, and, further, could be used by agencies to finance the procurement of personal services, such as automatic data processing systems design and programing services where existing authority is inadequate. The Department would not object to this interpretation, provided that, the provisions of subsection (e) notwithstanding, agencies would not be precluded from using existing authorities to provide similar services.

The Treasury Department believes that subsection (f) would authorize the expansion of the currently limited efforts of the Department of Commerce in providing scientific and technological advisory services and proposing standards in the automatic data processing field. The Department believes that such an expansion of efforts is needed and fully supports this provision.

The Department has been advised by the Bureau of the Budget that there is no objection from the standpoint of the administration's program to the submission of this report to your committee.

Sincerely yours,

FRED B. SMITH,
Acting General Counsel.

GENERAL COUNSEL OF THE
DEPARTMENT OF COMMERCE,
Washington, D.C., March 22, 1965.

Hon. JACK BROOKS,
Chairman, Government Activities Subcommittee, Committee on Government Operations, House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: This letter is in reply to your request for the views of this Department on H.R. 4845, a bill to provide for the economic and efficient purchase, lease, maintenance, operation, and utilization of automatic data processing equipment by Federal departments and agencies.

We are in accord with the objectives of the bill and believe most of its provisions would be helpful in advancing the development, effective application, and economic use of automatic data processing throughout the executie branch. In particular, we believe that subsection 111(c) of the bill authorizing the establishment of a revolving fund for equipping and operating automatic data processing centers to serve Federal agencies should enable some Federal agencies more readily and economically to exploit computer technology in their operations.

Subsection 111(f) recognizes important responsibilities in the Department of Commerce. Under that subsection, the Secretary of Commerce would be authorized to provide Federal agencies with scientific and technological advisory services related to automatic data processing and related systems, to submit recommendations to the President on uniform Federal automatic data processing standards, and to undertake in connection with the above necessary research in the sciences and technologies of computer and related systems.

The Department of Commerce is a pioneer in the development of automatic data processing technology and systems and under existing authority has provided an important part of the Federal research and development in this area. While the Department's existing authority is very broad, we think it is appropriate in any legislation on central management of automatic data processing equipment, for specific functions to be assigned to the Secretary of Commerce. Such an assignment is desirable because it makes clear the relationship between the various agencies concerned with this very important subject. We do not construe subsection 111(f) as limiting in any way this Department's broad authority for scientific research.

The Bureau of the Budget's recent report on the management of automatic data processing in the Federal Government, which the President transmitted to the Congress on March 2, 1965, recommended, among other things:

"In order to improve the state of the art and to provide a source of expertise to the Government agencies we recommend legislation to provide specific authority and direction to the Secretary of Commerce to establish a centralized research center on computer science and technology and to provide advisory and consultative services to Government agencies on computer systems development and technical problems."

Bureau of the Budget Circular No. A-71, issued March 6, 1965, assigns responsibilities for the administration and management of automatic data processing activities. The specific responsibilities of the Department of Commerce under the circular are as follows:

> "The Department of Commerce is responsible for aiding in the achievement of increased cost effectiveness in the selection, acquisition and utilization of automatic data processing equipment, and in this connection will perform the following functions:
>
> "(*a*) Provide advisory and consultative services to executive agencies on the methods for developing information systems based on the use of computers and the programing and languages thereof.

"(*b*) Undertake research on computer sciences and techniques, including system design, oriented primarily toward Government applications.

"(*c*) Provide day-to-day guidance and monitorship of an executive branch program for supporting the development, measurement, and testing of voluntary commercial standards for automatic data processing equipment, techniques, and computer languages.

"(*d*) Improve compatibility in automatic data processing equipment procured by the Federal Government by recommending uniform Federal standards for automatic data processing equipment, techniques, and computer languages."

We believe the language of subsection 111(f) of the bill provides adequate legislative recognition for these responsibilities.

Subsection 111(b) of the bill places certain central functions with respect to ADP equipment in the Administrator of General Services Administration. In the report President Johnson recently transmitted to the Congress, the following conclusion was stated:

"We have concluded that the establishment of a separate office empowered with authority and responsibility to make decisions on the procurement and utilization of ADP equipment would dilute the responsibility of agency heads for the management of their organizations, that it would serve to divorce ADP management from the established arrangements for Presidential surveillance over the overall management of the executive branch, and that it would interfere with direct Government agency-contractor relationships unnecessarily."

Construing subsection 111(b) together with subsection 111(g), we believe it is clear that the central role of GSA would be subject to the direction and policy guidance of the President and the Bureau of the Budget in accordance with the report the President recently transmitted to the Congress and that the agencies would determine their own needs for ADP equipment. Subsections 111(b) and 111(g) could be considered ambiguous, however, with respect to who shall make the final determination concerning the kinds of specifications of ADP equipment needed to meet stated agency requirements effectively and economically.

Agency heads are charged with the responsibility for the proper and efficient conduct of their programs and need to have authority commensurate with this responsibility. This is particularly important when it relates to decisions about the kinds of ADP equipment needed to meet agency requirements. In many agencies ADP equipment has become a major resource on which program operations and the management strutcures of those agencies are vitally dependent. It is not practicable to expect the Administrator of the General Services Administration to make or review decisions about agency ADP equipment needs that necessarily involve agency program and management judgments. Consistent with this understanding, we construe subsection 111(g) as a limitation on the authority of the Administrator and as leaving to each agency the final determination with respect to the kinds or specifications of ADP equipment needed for meeting the agency requirements effectively and economically.

Subject to these understandings, the Department would favor enactment of H.R. 4845.

We have been advised by the Bureau of the Budget that there would be no objection to the submission of this report from the standpoint of the administration's program.

Sincerely,

ROBERT E. GILES,
General Counsel.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
March 25, 1965.

HON. WILLIAM L. DAWSON,
Chairman, Committee on Government Operations,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: This letter is in response to your request of February 19, 1965, for a report on H.R. 4845, a bill "to provide for the economic and efficient purchase, lease, maintenance, operation, and utilization of automatic data processing equipment by Federal departments and agencies."

The bill would provide for the Administrator of General Services to coordinate and control the purchase, lease, and maintenance of automatic data processing equipment by, or at the expense of, Federal agencies. It would also establish an automatic data processing fund on the books of the Treasury for the payment of costs incident to management of such equipment.

We are in general agreement with the provisions of this bill. We specifically approve of the provisions reserving the right of the executive departments and agencies to establish their own requirements. The agency responsible for the administration of operating programs must have the authority to select the equipment it needs in order to carry out its programs and it should not be restricted in its utilization of equipment. We believe that section 111(g) of the bill contains adequate safeguards to permit effective and efficient administration of agency programs without undue interference.

We believe the establishment of a central data processing fund to finance the acquisition and maintenance of automatic data processing equipment will permit more economical decisions as to whether equipment should be leased or purchased. Under present circumstances, an agency must lease the equipment even though longrun savings would result from purchase only because budget funds are not available. The central data processing fund will permit immediate purchase if all other factors indicate it would be more economical to do so.

In summary, we approve of the bill so long as the bill clearly reserves to the executive departments and agencies the right to determine their own requirements.

We are advised by the Bureau of the Budget that there is no objection to the presentation of this report from the standpoint of the administration's program.

Sincerely,

WILBUR J. COHEN,
Assistant Secretary.

DEPARTMENT OF STATE,
Washington, D.C., March 12, 1965.

Hon. WILLIAM L. DAWSON,
House of Representatives.

DEAR MR. CHAIRMAN: The Department of State appreciates the opportunity to comment on the bill, H.R. 4845, "to provide for the economic and efficient purchase, lease, maintenance, operation, and utilization of automatic data processing equipment by Federal departments and agencies."

The Department's view of the proposed legislation is that it is consistent with the report to the President on "The Management of Automatic Data Processing in the Federal Government," which was approved by the President and submitted to the Congress on March 2, 1965; and that administration of the bill would be in accordance with the provisions of Bureau of the Budget Circular No. A–71, March 6, 1965, on the subject of responsibilities for the administration and management of automatic data processing activities.

The Department is pleased to observe that the bill does not place in another agency any management authority necessary to the successful attainment of its plans for extending the use of data processing systems which are designed to cope with continuing workload increases without corresponding increases in personnel.

The Bureau of the Budget advises that from the standpoint of the administration's program there is no objection to the submission of these comments.

Sincerely yours,

DOUGLAS MACARTHUR II,
Assistant Secretary for Congressional Relations
(For the Secretary of State).

DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D.C., March 22, 1965.

Hon. WILLIAM L. DAWSON,
Chairman, Committee on Government Operations,
House of Representatives, Washington, D.C.

DEAR MR. DAWSON: This responds to your request for the views of this Department on H.R. 4845, a bill "To provide for the economic and efficient purchase, lease, maintenance, operation, and utilization of automatic data-processing equipment by Federal departments and agencies."

We recommend enactment of the bill.

The bill reflects the recommendations made in the report entitled "The Management of Automatic Data Processing in the Federal Government," which was transmitted to the Congress by the President on March 2, 1965. We concur, therefore, with the report on H.R. 4845 made to your committee by the Bureau of the Budget, which was sent to you on March 11, 1965.

The Bureau of the Budget has advised that there is no objection to the presentation of this report from the standpoint of the administration's program.

Sincerely yours,

GEORGE E. ROBINSON,
Deputy Assistant Secretary of the Interior.

DEPARTMENT OF LABOR,
Washington, May 7, 1965.

Hon. WILLIAM L. DAWSON,
Chairman, Committee on Government Operations,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: This is in response to your request for our views on H.R. 4845, a bill to provide for the economic and efficient purchase, lease, maintenance, operation, and utilization of automatic data processing equipment by Federal departments and agencies.

Shortly after receiving H.R. 4845 for comment, we received Bureau of the Budget Circular No. A–71, entitled "Responsibilities for the Administration and Management of Automatic Data Processing Activities." This circular establishes a Government-wide program for the coordination of ADP activities carried on by the Federal Government. It clearly prescribes the responsibilities of the Bureau of the Budget, the General Services Administration, and other agencies with regard to ADP administration and operations.

It appears that Circular No. A–71 accomplishes the objectives of H.R. 4845 and, accordingly, enactment of this measure seems to be unnecessary at this time. However, we would have no objection to its enactment if the Congress considers it advisable.

The Bureau of the Budget advises that there is no objection to the submission of this report from the standpoint of the administration's program.

Sincerely,

W. WILLARD WIRTZ,
Secretary of Labor.

VETERANS' ADMINISTRATION,
OFFICE OF THE ADMINISTRATOR OF VETERANS' AFFAIRS,
Washington, D.C., March 23, 1965.

Hon. JACK BROOKS,
Chairman, Government Activities Subcommittee, Committee on Government Operations, House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: This refers to your request for a report by the Veterans' Administration on H.R. 4845, 89th Congress, a bill "To provide for the economic and efficient purchase, lease, maintenance, operation, and utilization of automatic data processing equipment by Federal departments and agencies."

H.R. 4845 would amend the Federal Property and Administrative Services Act of 1949 to authorize the Administrator of the General Services Administration to coordinate and provide for the economic

and efficient purchase, lease, and maintenance of automatic data processing equipment by Federal agencies. As part of his responsibility, he would be authorized to transfer such equipment between Federal agencies, to require joint utilization of the equipment, and to establish and operate equipment pools and data processing centers.

An automatic data processing fund would be established for the procurement and maintenance or repair of ADP equipment. Provision is made for appropriations to such fund and for the crediting of advances and reimbursements from available appropriations and funds of other agencies, organizations, or contractors utilizing the equipment.

This bill would also authorize the Secretary of Commerce to provide agencies with scientific and technological advisory services relating to automatic data processing, to make recommendations to the President relating to the establishment of uniform Federal standards, and to conduct research in connection with this new form of science or technology. The bill also provides that the authority conferred upon the Administrator of the General Services Administration shall not be construed as to impair or interfere with determinations by agencies concerning their individual ADP requirements nor shall he interfere with, or attempt to control, the use of such equipment by agencies.

We in the Veterans' Administration are very much aware of the significant role that automatic data processing equipment and related systems have played in increasing effectiveness and improving productivity in Government operations. We have made a most determined effort to integrate the tools of data processing with the services we are responsible for providing and have made them an integral part of our major program operations. As a result, decisions concerning the procurement of this type of equipment, and the manner in which it is to be used, are directly related to the success or failure of such programs. Flexibility and discretion in making these decisions are absolutely necessary for the effective administration of the programs involved.

During the past few years the Executive Office of the President, and the General Services Administration, have issued a series of bulletins and circulars which prescribe methods of selection, acquisition, and use of automatic data processing equipment.

(*a*) Bureau of the Budget Bulletin 60–6, March 1960, prescribed guidelines for studying the feasibility of using ADP equipment.

(*b*) Bureau of the Budget Circular A–54, October 1961, provided guidelines for selecting equipment and deciding whether to purchase or lease.

(*c*) Bureau of the Budget Circular A–55, November 1963, is the basis for an annual inventory of ADP equipment use, costs, personnel, and applications.

(*d*) Bureau of the Budget Circular A–61, August 1963, is an aid for agencies to assess their ADP programs.

(*e*) Bureau of the Budget Circular A–27, June 1964, creates ADP sharing exchanges in the major cities of the country.

(*f*) GSA Regulation No. 36, April 1964, deals with the reuse or disposition of equipment which exceeds a user's needs.

The Veterans' Administration has complied with all of these directives and the desired economies have been achieved. We have pur-

chased all of our 13 computers. Utilization of our major systems is extremely high; for example, the two large 7080 systems were utilized 1,443 hours out of a possible 1,488 hours (97 percent) in January 1965. We are participating fully in the GSA sharing exchange program both in Washington and throughout the country. (For further facts, see enclosure.)

We are, of course, aware of the report to the President on the management of automatic data processing in the Federal Government, which has just been completed by the Bureau of the Budget and was transmitted to the Congress on March 2, 1965. That report took the position that the existing organizational arrangements with respect to automatic data processing in the Federal Government are basically sound. Such report, however, indicated a need to strengthen the resources devoted to the management of ADP. General legislation was therefore recommended which would (1) provide an expression of congressional policy on the acquisition and use of automatic data processing equipment; and (2) give a specific directive to the Bureau of the Budget and the General Services Administration, within the areas of their presently assigned responsibilities, to take necessary actions to assure the most economic and effective use of automatic data processing. In addition, a specific legislation was recommended (1) to provide for the establishment of a revolving fund to facilitate the establishment of service centers, equipment pools, and time-sharing arrangements; (2) to develop, measure, test, and make provisions for the approval and implementation of Federal standards for ADP equipment and techniques; and (3) to provide specific authority and direction to the Secretary of Commerce to establish a centralized research center on computer sciences and technology, and to provide advisory and consultative services on computer systems development and related scientific and technical problems. We note that certain of these recommendations have been incorporated in H.R. 4845.

Although this bill would give broad authority to the Administrator of the General Services Administration to coordinate the procurement and utilization of ADP equipment by Federal agencies (including authority to transfer such equipment between Federal agencies or to require its joint utilization), such authority is tempered by the provision that it should not be construed as to impair or interfere with determinations by agencies concerning their individual ADP requirements, nor interfere with, or attempt to control, the use of such equipment by agencies. Moreover, we note that the President has approved the recommendations contained in the Bureau of the Budget study of the management of automatic data processing, and we further note the statement of the Bureau of the Budget in its report of March 11, 1965, to your committee that the legislation proposed will assist in carrying them out.

Under the circumstances set forth above, we would have no objection to the favorable consideration of H.R. 4845 by your committee.

We are advised by the Bureau of the Budget that there is no objection from the standpoint of the administration's program to the presentation of this report to your committee.

Sincerely,

W. J. DRIVER, *Administrator.*

Annual savings derived from purchase of ADP equipment, calculations based on January 1965 use

Location	Type system (IBM)	Date of purchase	Purchase price, net	Amortization completed date [1]	Annual savings [2]
Philadelphia data processing center.	1401	June 1962	$214,000	June 1964	$125,600
	1401	November 1962	289,000	November 1964	149,000
	7080(80K)	do	2,073,000	August 1965	772,000
	Additional 80K for 7080.	June 1964	397,000	August 1967	128,000
	1903	December 1965	22,000	February 1969	7,000
Hines data processing center.	1401	June 1962	235,000	September 1964	107,000
	1401	July 1963	205,000	September 1965	98,000
	7080(80K)	June 1962	2,109,000	December 1964	866,000
	Additional 80K for 7080.	September 1964	391,000	June 1967	143,000
	1903	July 1965	22,000	September 1968	7,000
St. Paul data processing center.	1401	November 1962	384,000	June 1965	149,000
	1401	July 1963	288,000	December 1965	119,000
	1404 printer added.	April 1964	86,000	June 1967	27,000
Los Angeles data processing center.	1401	July 1963	172,000	April 1967	46,000
Washington data processing center.	1401	July 1963	235,000	October 1965	107,000
	Additional memory; 2 features.	May 1964	66,000	August 1967	30,000
	2 tape drives	October 1964	44,000	May 1969	10,000
Hines Veterans' Administration hospital.	1620	do	59,000	December 1967	18,500
Little Rock Veterans' Administration hospital.	1620	do	55,000	September 1967	19,000
Omaha Veterans' Administration hospital.	1620	October 1961	55,000	November 1965	13,500
	1622	March 1994	18,000	July 1967	5,500
Total costs and estimated annual savings.			7,449,000		2,946,500

[1] Amortization completion date determined by dividing the purchase price by the annual savings.
[2] Annual savings derived by estimating the rental charges if the equipment were not purchased and subtracting the annual maintenance costs from the result. Estimates of annual rental costs are based on current utilization of the equipment.

ATOMIC ENERGY COMMISSION,
Washington, D.C., March 16, 1965.

Hon. WILLIAM L. DAWSON,
Chairman, Committee on Government Operations,
House of Representatives, Washington, D.C.

DEAR MR. DAWSON: This is in reply to your request for the views of the Atomic Energy Commission on H.R. 4845, a bill to provide for the economic and efficient purchase, lease, maintenance, operation, and utilization of automatic data processing equipment by the Federal departments and agencies.

As you are aware, President Johnson transmitted to the Congress on March 2, 1965, a report on Federal policy and practices in the acquisition and utilization of electronic computers in Government. The Atomic Energy Commission was represented on the Advisory Committee to the Bureau of the Budget and on the project staff with respect to the study which resulted in this report to the Congress. We agree with the objectives of H.R. 4845 and believe that they are consistent with the policies and recommendations for increased efficiency and economy in the administration and management of automatic data processing equipment outlined in this report. We feel, however, that it would be desirable to clarify certain language presently appearing in the bill. For example, section 111(a) authorizes and directs the

GSA Administrator to coordinate and provide for the economic and efficient purchase, lease, and maintenance of automatic data processing equipment. This authority could be interpreted so broadly as to include the selection and acquisition of equipment or it might be interpreted so narrowly to include only the negotiation of Federal Supply Service contracts. We believe that the functions to be performed by central agencies should involve primarily the issuance of policies, procedures, and guidelines for use by the various departments and agencies and that the presently recognized responsiblities of individual departments and agencies in managing their own ADP resources within such policies and guidelines should continue substantially unchanged. Accordingly, the AEC believes that the GSA Administrator's responsibilities should be clearly defined and limited in the manner we have suggested. Another source of concern to us is the apparent absence in the bill of a clear statement of whether GSA or individual agencies would have responsibility for budgeting and financing the acquisition of ADP equipment.

We have been advised by the Bureau of the Budget that there is no objection from the standpoint of the administration's program to the transmittal of this letter.

Sincerely yours,

JOHN V. VINCIGUERRA
(For General Manager).

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION,
OFFICE OF THE ADMINISTRATOR,
Washington, D.C., March 29, 1965.

Hon. JACK BROOKS,
Chairman, Government Activities Subcommittee, Committee on Government Operations, House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: This refers to your request for a report by the National Aeronautics and Space Administration on H.R. 4845, a bill to provide for the economic and efficient purchase, lease, maintenance, operation, and utilization of automatic data processing equipment by Federal departments and agencies.

As we understand the legislation, it is designed to provide the necessary executive authority and responsibility for the economical and efficient acquisition and management of automatic data processing equipment. It is primarily directed to the processing of administrative types of data, such as payrolls, inventories, and personnel records. It would accomplish this by assigning certain general powers to the Administrator of the General Services Administration. The National Aeronautics and Space Administration has studied those provisions and feels that they are well designed to carry out the purposes of the bill, particularly the provisions which would establish a revolving fund for the acquisition and sharing of equipment. In the area of administrative use we feel that the proposed legislation presents no problem to this agency.

The National Aeronautics and Space Administration is a specialized user of certain highly technical automatic data processing equipment. The newest and more complicated machines are made

integral parts of space experiments. The management of research automatic data processing equipment, particularly as it applies to space exploration, is highly sophisticated and must remain exclusively in the experimenting agency.

We feel that the bill adequately protects the research agencies in that it not only provides that the Administrator's powers are not to be construed to impair or interfere with the determination by agencies and other users of their automatic data processing equipment requirements, it affirmatively permits the Administrator to delegate to Federal agencies authority to maintain individual automatic data processing systems when that action is necessary for the economy and efficiency of operations, the national defense or security, or for the orderly implementation of overall programs for the utilization of such equipment.

Additionally, we note with approval that the bill authorizes the Secretary of Commerce to provide scientific and technological advisory services relating to automatic data processing matters and to recommend to the President uniform Federal standards in that field.

For the foregoing reasons, the National Aeronautics and Space Administration recommends that the bill, H.R. 4845, be favorably considered.

The Bureau of the Budget has advised that, from the viewpoint of the program of the President, there is no objection to the submission of this report to the Congress.

Sincerely yours,

RICHARD L. CALLAGHAN,
Assistant Administrator for Legislative Affairs.

FEDERAL AVIATION AGENCY,
OFFICE OF THE ADMINISTRATOR,
Washington, D.C., March 15, 1965.

Hon. WILLIAM L. DAWSON,
Chairman, Committee on Government Operations,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: This is in response to your letter of February 19, 1965, and to Subcommittee Chairman Brooks' letter of February 26, 1965, requesting our views on H.R. 4845, a bill to provide for the economic and efficient purchase, lease, maintenance, operation, and utilization of automatic data processing equipment by Federal departments and agencies.

We are in agreement with the general objectives of the proposed bill insofar as they would provide for the economic and efficient acquisition and utilization of Government automatic data processing equipment. The challenge will be in attaining the objectives without undermining the responsibilities of the individual agencies for their operations and the application of automatic data processing thereto.

The FAA is at the present time installing an automated air traffic control system utilizing computer systems. Those systems have at-

tached to them specially designed equipment to work in conjunction with the computers. This highly specialized equipment is built to specifications which are required to satisfy the unique operational requirements for control of movement of aircraft in the air. These computer systems are used 24 hours a day and every day of the year in a real time environment. It is essential that we retain effective control over the design, installation, maintenance and utilization of these and other specialized systems used in our technical operations. They cannot be available for joint use with other agencies. To transfer our control of these systems to GSA would seriously hamper our efforts to carry out our air safety responsibilities. It would further be uneconomic as it would require a staff at GSA matching the size and technical competence of the staff already operating at FAA. We expect therefore that full responsibility for these specialized systems will be delegated to FAA if H.R. 4845 is enacted.

I appreciate Chairman Brooks' invitation to testify at the March 23 hearing to be held by the Government Operations Subcommittee. I am advised that the Bureau of the Budget intends to arrange presentation of the views of the executive branch at that hearing and I do not see anything I could add to that presentation other than what have been stated in this letter.

The Bureau of the Budget has advised that there is no objection from the standpoint of the administration's program to the submission of this report to your committee.

Sincerely,

N. E. HALABY, *Administrator.*

CENTRAL INTELLIGENCE AGENCY,
OFFICE OF DEPUTY DIRECTOR OF CENTRAL INTELLIGENCE,
Washington, D.C., April 8, 1965.

Hon. WILLIAM L. DAWSON,
Chairman, Committee on Government Operations,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: We wish to submit the views of this Agency on H.R. 4845, 89th Congress, a bill to provide for the economic and efficient purchase, lease, maintenance, operation, and utilization of automatic data processing equipment by Federal departments and agencies.

We endorse H.R. 4845's objective to achieve economic and effective use of automatic data processing equipment. Guidance, support, and standardization are extremely important goals in the automatic data processing field. Further, we appreciate the problem of drafting such legislation to assure that the authorities and responsibilities are sufficient to the task, without impairing the effectiveness of Federal agencies.

As is the case with many other agencies, the Central Intelligence Agency regards automatic data processing equipment as an invaluable and indispensable aid in the performance of its responsibilities. Such equipment has enhanced our capability to coordinate, correlate, and

evaluate the vital and complicated security data and intelligence information which we are receiving in ever-increasing quantities.

CIA uses both specialized and general commercial equipment in its automatic data processing program. In both cases, however, utilization is inextricably involved in the security responsibilities of the Director of Central Intelligence.

For your information, the National Security Act of 1947, as amended, provides, in part, as follows:

"* * *, That the Director of Central Intelligence shall be responsible for protecting intelligence sources and methods from unauthorized disclosure; * * *" (50 U.S.C. 401).

Although we wholeheartedly support the basic objective of the bill, compliance by the Director of Central Intelligence with the full scope of the authorities and responsibilities of the Administrator, GSA, raises a serious question of conflict with the Director's statutory responsibility to protect intelligence sources and methods and data relating to the organization of this Agency.

We are informed that there is no intent to subordinate the security responsibilities of the Director of Central Intelligence to the provisions of the bill. This was also indicated in the hearings and floor discussion on H.R. 5171, a similar bill introduced in the 88th Congress, where we find numerous references to intelligence as an example of the type of activities the Administrator would or should exempt from the provisions of the proposed law.

While H.R. 4845 provides the Administrator with similar authority to grant exceptions from the full scope of the bill, we feel that the potential for statutory conflict on this matter warrants clarification in the bill itself. Therefore, we recommend that there be added to the sentences which ends on line 3, page 5, the following proviso:

": *Provided*, That where a head of a Federal agency determines that compliance will require the disclosure of national security information for which he has responsibility, pursuant to law, to protect from unauthorized disclosure, the provisions of this section shall not apply."

We will be happy to provide any additional information that your committee may request.

The Bureau of the Budget has advised, that from the standpoint of the administration's program, there is no objection to the submission of this report.

Faithfully yours,

MARSHALL S. CARTER,
Lieutenant General, U.S. Army, Deputy Director.

CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

In compliance with clause 3 of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (new matter is printed in italic, existing law in which no change is proposed is shown in roman):

TITLE I OF THE FEDERAL PROPERTY AND ADMINISTRATIVE SERVICES ACT OF 1949, AS AMENDED

TITLE I—ORGANIZATION

GENERAL SERVICES ADMINISTRATION

SEC. 101. (a) There is hereby established an agency in the executive branch of the Government which shall be known as the General Services Administration.

(b) There shall be at the head of the General Services Administration an Administrator of General Services who shall be appointed by the President by and with the advice and consent of the Senate, and perform his functions subject to the direction and control of the President.

(c) There shall be in the General Services Administration a Deputy Administrator of General Services who shall be appointed by the Administrator of General Services. The Deputy Administrator shall perform such functions as the Administrator shall designate and shall be Acting Administrator of General Services during the absence or disability of the Administrator and, unless the President shall designate another officer of the Government, in the event of a vacancy in the office of Administrator.

(d) Pending the first appointment of the Administrator under the provisions of this section, his functions shall be performed temporarily by such officer of the Government in office upon or immediately prior to the taking of effect of the provision of this Act as the President shall designate, and such officer while so serving shall receive the salary fixed for the Administrator.

(e) Pending the effective date of other provisions of law fixing the rates of compensation of the Administrator, the Deputy Administrator and of the heads and assistant heads of the principal organizational units of the General Services Administration, and taking into consideration provisions of law governing the compensation of officers having comparable responsibilities and duties, the President shall fix for each of them a rate of compensation which he shall deem to be commensurate with the responsibilities and duties of the respective offices involved.

TRANSFER OF AFFAIRS OF BUREAU OF FEDERAL SUPPLY

SEC. 102. (a) The functions of (1) the Bureau of Federal Supply in the Department of the Treasury, (2) the Director of the Bureau of Federal Supply, (3) the personnel of such Bureau, and (4) the Secretary of the Treasury relating to the Bureau of Federal Supply, are hereby transferred to the Administrator. The records, property, personnel, obligations, and commitments of the Bureau of Federal Supply, together with such additional records, property, and personnel of the Department of the Treasury as the Director of the Bureau of the Budget shall determine to relate primarily to functions transferred by this section or vested in the Administrator by titles II, III, and VI, of this Act, are hereby transferred to the General Services

Administration. The Bureau of Federal Supply and the office of Director of the Bureau of Federal Supply are hereby abolished.

(b) The functions of the Director of Contract Settlement and of the Office of Contract Settlement, transferred to the Secretary of the Treasury by Reorganization Plan Numbered 1 of 1947, are transferred to the Administrator and shall be performed by him or, subject to his direction and control, by such officers and agencies of the General Services Administration as he may designate. The Contract Settlement Act Advisory Board created by section 5 of the Contract Settlement Act of 1944 (58 Stat. 649) and the Appeal Board established under section 13(d) of that Act are transferred from the Department of the Treasury to the General Services Administration, but the functions of these Boards shall be performed by them, respectively, under conditions and limitations prescribed by law. There shall also be transferred to the General Services Administration such records, property, personnel, obligations, commitments, and unexpended balances (available or to be made available) of appropriations, allocations, and other funds of the Treasury Department as the Director of the Bureau of the Budget shall determine to relate primarily to the functions transferred by the provisions of this subsection.

(c) Any other provision of this section not withstanding, there may be retained in the Department of the Treasury any function referred to in subsection (a) of this section which the Director of the Bureau of the Budget shall, within ten days after the effective date of this Act, determine to be essential to the orderly administration of the affairs of the agencies of such Department, other than the Bureau of Federal Supply, together with such records, property, personnel, obligations, commitments, and unexpended balances of appropriations, allocations, and other funds, available or to be made available of said Department, as said Director shall determine.

TRANSFER OF AFFAIRS OF THE FEDERAL WORKS AGENCY

SEC. 103. (a) All functions of the Federal Works Agency and of all agencies thereof, together with all functions of the Federal Works Administrator, of the Commissioner of Public Buildings, and of the Commissioner of Public Roads, are hereby transferred to the Administrator of General Services. There are hereby transferred to the General Services Administration the Public Roads Administration, which shall hereafter be known as the Bureau of Public Roads, and all records, property, personnel, obligations, and commitments of the Federal Works Agency, including those of all agencies of the Federal Works Agency.

(b) There are hereby abolished the Federal Works Agency, the Public Buildings Administration, the office of Federal Works Administrator, the office of Commissioner of Public Buildings, and the office of Assistant Federal Works Administrator.

RECORDS MANAGEMENT: TRANSFER OF THE NATIONAL ARCHIVES

SEC. 104. (a) The National Archives Establishment and its functions, records, property, personnel, obligations, and commitments are hereby transferred to the General Services Administration. There are

transferred to the Administrator (1) the functions of the Archivist of the United States, except that the Archivist shall continue to be a member or chairman, as the case may be, of the bodies referred to in subsection (b) of this section, and (2) the functions of the Director of the Division of the Federal Register of the National Archives Establishment. The Archivist of the United States shall hereafter be appointed by the Administrator.

(b) There are also transferred to the General Services Administration the following bodies, together with their respective functions and such funds as are derived from Federal sources: (1) The National Archives Council and the National Historical Publications Commission, established by the Act of June 19, 1934 (48 Stat. 1122), (2) the National Archives Trust Fund Board, established by the Act of July 9, 1941 (55 Stat. 581), (3) the Board of Trustees of the Franklin D. Roosevelt Library, established by the Joint Resolution of July 18, 1939 (53 Stat. 1062), and (4) the Administrative Committee established by section 6 of the Act of July 26, 1935 (49 Stat. 501), which shall hereafter be known as the Administrative Committee of the Federal Register. The authority of the Administrator under section 106 hereof shall not extend to the bodies or functions affected by this subsection.

(c) The Administrator is authorized (1) to make surveys of Government records and records management and disposal practices and obtain reports thereon from Federal agencies; (2) to promote, in cooperation with the executive agencies, improved records management practices and controls in such agencies, including the central storage or disposition of records not needed by such agencies for their current use; and (3) to report to the Congress and the Director of the Bureau of the Budget from time to time the results of such activities.

TRANSFER FOR LIQUIDATION OF THE AFFAIRS OF THE WAR ASSETS ADMINISTRATION

SEC. 105. The functions, records, property, personnel, obligations, and commitments of the War Assets Administration are hereby transferred to the General Services Administration. The functions of the War Assets Administrator are hereby transferred to the Administrator of General Services. The War Assets Administration, the office of the War Assets Administrator, and the office of Associate War Assets Administrator are hereby abolished. Personnel now holding appointments granted under the second sentence of section 5(b) of the Surplus Property Act of 1944, as amended, may be continued in such positions or may be appointed to similar positions for such time as the Administrator may determine.

REDISTRIBUTION OF FUNCTIONS

SEC. 106. The Administrator is hereby authorized, in his discretion, in order to provide for the effective accomplishment of the functions transferred to or vested in him by this Act, and from time to time, to regroup transfer, and distribute any such functions within the General Services Administration. The Administrator is hereby authorized to transfer the funds necessary to accomplish said functions and report such transfers of funds to the Director of the Bureau of the Budget.

TRANSFER OF FUNDS

SEC. 107. (a) All unexpended balances of appropriations, allocations, or other funds available or to be made available, for the use of the Bureau of Federal Supply, the War Assets Administration, the Federal Works Agency, and the National Archives Establishment, and so much of the other unexpended balances of appropriations, allocations, or other funds of the Department of the Treasury, available or to be made available, as the Director of the Bureau of the Budget shall determine to relate primarily to functions transferred to or vested in the Administrator by the provisions of this Act, shall be transferred to the General Services Administration for use in connection with the functions to which such balances relate, respectively.

(b) When other functions are transferred to the General Services Administration from any Federal agency, under section 201(a) (2) or (3), or otherwise under this Act, there shall be transferred such records, property, personnel, appropriations, allocations, and other funds of such agency to the General Services Administration as the Director of the Bureau of the Budget shall determine to relate primarily to the functions so transferred.

STATUS OF TRANSFERRED EMPLOYEES

SEC. 108. Subject to other provisions of this title relating to personnel, employees transferred by the provisions of this title shall be deemed to be employees of the General Services Administration and their reappointment shall not be required by reason of the enactment of this Act.

GENERAL SUPPLY FUND

SEC. 109. (a) There is hereby authorized to be set aside in the Treasury a special fund which shall be known as the General Supply Fund. Such fund shall be composed of the assets of the general supply fund (including any surplus therein) created by section 3 of the Act of February 27, 1929 (45 Stat. 1342; 41 U.S.C. 7e), and transferred to the Administrator by section 102 of this Act, such sums as may be appropriated thereto, and the value, as determined by the Administrator, of inventories of personal property from time to time transferred to the Administrator by other executive agencies under authority of section 201(a)(2) to the extent that payment is not made or credit allowed therefor, and the fund shall assume all of the liabilities, obligations, and commitments of the general supply fund created by such Act of February 27, 1929. The General Supply Fund shall be available for use by or under the direction and control of the Administrator (1) for procuring personal property (including the purchase from or through the Public Printer, for warehouse issue, of standard forms, blank-book work, standard specifications, and other printed material in common use by Federal agencies not available through the Superintendent of Documents) and nonpersonal services for the use of Federal agencies in the proper discharge of their responsibilities, and (2) for paying the purchase price, transportation of personal property and services, and the cost of personal services employed directly in the repair, rehabilitation, and conversion of personal property.

(b) Payment by requisitioning agencies shall be at prices fixed by the Administrator. Such prices shall be fixed at levels so as to recover so far as practicable the applicable purchase price, the transportation cost, inventory losses, the cost of personal services employed directly in the repair, rehabilitation, and conversion of personal property, and the cost of amortization and repair of equipment utilized for lease or rent to executive agencies. Requisitioning agencies shall pay by advance of funds in all cases where it is determined by the Administrator that there is insufficient capital otherwise available in the General Supply Fund. Advances of funds also may be made by agreement between the requisitioning agencies and the Administrator. Where an advance of funds is not made, the General Services Administration shall be reimbursed promptly out of funds of the requisitioning agency in accordance with accounting procedures approved by the Comptroller General: *Provided*, That in any case where payment shall not have been made by the requisitioning agency within forty-five days after the date of billing by the Administrator or the date on which an actual liability for personal property or services is incurred by the Administrator, which ever is the later, reimbursement may be obtained by the Administrator by the issuance of transfer and counterwarrants, or other lawful transfer documents, supported by itemized invoices.

(c) The General Supply Fund shall be credited with all reimbursements, advances of funds, and refunds or recoveries relating to personal property or services procured through the fund, including the net proceeds of disposal of surplus personal property procured through the fund and receipts from carriers and others for loss of, or damage to, personal property procured through the fund; and the same are hereby reappropriated for the purposes of the fund.

(d) [Repealed.]

(e) The Comptroller General of the United States shall make an annual audit of the General Supply Fund as of June 30, and there shall be covered into the United States Treasury as miscellaneous, receipts any surplus found therein, all assets, liabilities, and prior losses considered, above the amounts transferred or appropriated to establish and maintain said fund, and the Comptroller General shall report to the Congress annually the results of the audit, together with such recommendations as he may have regarding the status and operations of the fund.

(f) Subject to the requirements of subsections (a) to (e), inclusive, of this section, the General Supply Fund also may be used for the procurement of personal property and nonpersonal services authorized to be acquired by mixed-ownership Government corporations, or by the municipal government of the District of Columbia, or by a requisitioning non-Federal agency when the function of a Federal agency authorized to procure for it is transferred to the General Services Administration.

(g) Whenever any producer or vendor shall tender any article or commodity for sale or lease to the General Services Administration or to any procurement authority acting under the direction and control of the Administrator pursuant to this Act, the Administrator is authorized in his discretion, with the consent of such producer or vendor, to cause to be conducted, in such manner as the Administrator shall

specify, such tests as he shall precribe either to determine whether such article or commodity conforms to prescribed specifications and standards, or to aid in the development of contemplated specifications and standards. When the Administrator determines that the making of such tests will serve predominantly the interest of such producer or vendor, he shall charge such producer or vendor a fee which shall be fixed by the Administrator is such amount as will recover the cost of conducting such tests, including all components of such cost, determined in accordance with accepted accounting principles. When the Administrator determines that the making of such tests will not serve predominantly the interest of such producer or vendor, he shall charge such producer or vendor such fee as he shall determine to be reasonable for the furnishing of such testing service. All such fees collected by the Administrator may be deposited in the general supply fund to be used for any purpose authorized by subsection 109(a) of this Act.

SEC. 110. There is hereby authorized to be established on the books of the Treasury, a Federal telecommunications fund, which shall be available without fiscal year limitation for expenses, including personal services, other costs, and the procurement by lease or purchase of equipment and operating facilities (including cryptographic devices) necessary for the operation of a Federal telecommunciations system, to provide local and long-distance voice, teletype, data, facsimile, and other communication services. There are authorized to be appropriated to said fund such sums as may be required which, together with the value, as determined by the Administrator, of supplies and equipment from time to time transferred to the Administrator under authority of section 205(f), less any liabilities assumed, shall constitute the capital of the fund: *Provided*, That said fund shall be credited with (1) advances and reimbursements from available appropriations and funds of any agency (including the General Services Administration), organization, or persons for telecommunication services rendered and facilities made available thereto, at rates determined by the Administrator to approximate the cost thereof met by the fund (including depreciation of equipment, provision for accrued leave, and where appropriate, for terminal liability charges and for amortization of installation costs, but excluding, in the determination of rates prior to the fiscal year 1966, such direct operating expenses as may be directly appropriated for, which expenses may be charged to the fund and covered by advances or reimbursements from such direct appropriations) and (2) refunds or recoveries resulting from operations of the fund, including the net proceeds of disposal of excess or surplus personal property and receipts from carriers and others for loss of or damage to property: *Provided further*, That following the close of each fiscal year any net income, after making provision for prior year losses, if any, shall be transferred to the Treasury of the United States as miscellaneous receipts.

AUTOMATIC DATA PROCESSING EQUIPMENT

SEC. 111. (a) The Administrator is authorized and directed to coordinate and provide for the economic and efficient purchase, lease, and maintenance of automatic data processing equipment by Federal agencies.

(b) (1) Automatic data processing equipment suitable for efficient and effective use by Federal agencies shall be provided by the Administrator through purchase, lease, transfer of equipment from other Federal agencies, or otherwise, and the Administrator is authorized and directed to provide by contract or otherwise for the maintenance and repair of such equipment. In carrying out his responsibilities under this section the Administrator is authorized to transfer automatic data processing equipment between Federal agencies, to provide for joint utilization of such equipment by two or more Federal agencies, and to establish and operate equipment pools and data processing centers for the use of two or more such agencies when necessary for its most efficient and effective utilization.

(2) The Administrator may delegate to one or more Federal agencies authority to operate automatic data processing equipment pools and automatic data processing centers, and to lease, purchase, or maintain individual automatic data processing systems or specific units of equipment, including such equipment used in automatic data processing pools and automatic data processing centers, when such action is determined by the Administrator to be necessary for the economy and efficiency of operations, or when such action is essential to national defense or national security. The Administrator may delegate to one or more Federal agencies authority to lease, purchase, or maintain automatic data processing equipment to the extent to which he determines such action to be necessary and desirable to allow for the orderly implementation of a program for the utilization of such equipment.

(c) There is hereby authorized to be established on the books of the Treasury an automatic data processing fund, which shall be available without fiscal year limitation for expenses, including personal services, other costs, and the procurement by lease, purchase, transfer, or otherwise of equipment, maintenance, and repair of such equipment by contract or otherwise, necessary for the efficient coordination, operation, utilization of such equipment by and for Federal agencies: Provided, That a report of equipment inventory, utilization, and acquisitions, together with an account of receipts, disbursements, and transfers to miscellaneous receipts, under this authorization shall be made annually in connection with the budget estimates to the Director of the Bureau of the Budget and to the Congress, and the inclusion in appropriation acts of provisions regulating the operation of the automatic data processing fund, or limiting the expenditures therefrom, is hereby authorized.

(d) There are authorized to be appropriated to said fund such sums as may be required which, together with the value, as determined by the Administrator, of supplies and equipment from time to time transferred to the Administrator, shall constitute the capital of the fund: Provided, That said fund shall be credited with (1) advances and reimbursements from available appropriations and funds of any agency (including the General Services Administration), organization, or

contractor utilizing such equipment and services rendered them, at rates determined by the Administrator to approximate the costs thereof met by the fund (including depreciation of equipment, provision for accrued leave, and for amortization of installation costs, but excluding, in the determination of rates prior to the fiscal year 1967, such direct operating expenses as may be directly appropriated for, which expenses may be charged to the fund and covered by advances or reimbursements from such direct appropriations) and (2) refunds or recoveries resulting from operations of the fund, including the net proceeds of disposal of excess or surplus personal property and receipts from carriers and others for loss of or damage to property: Provided further, That following the close of each fiscal year any net income, after making provisions for prior year losses, if any, shall be transferred to the Treasury of the United States as miscellaneous receipts.

(e) The proviso following paragraph (4) in section 201(a) of this Act and the provisions of section 602(d) of this Act shall have no application in the administration of this section. No other provision of this Act or any other Act which is inconsistent with the provisions of this section shall be applicable in the administration of this section.

(f) The Secretary of Commerce is authorized (1) to provide agencies, and the Administrator of General Services in the exercise of the authority delegated in this section, with scientific and technological advisory services relating to automatic data processing and related systems, and (2) to make appropriate recommendations to the President relating to the establishment of uniform Federal automatic data processing standards. The Secretary of Commerce is authorized to undertake the necessary research in the sciences and technologies of automatic data processing computer and related systems, as may be required under provisions of this subsection.

(g) The authority conferred upon the Administrator and the Secretary of Commerce by this section shall be exercised subject to direction by the President and to fiscal and policy control exercised by the Bureau of the Budget. Authority so conferred upon the Administrator shall not be so construed as to impair or interfere with the determination by agencies of their individual automatic data processing equipment requirements, including the development of specifications for and the selection of the types and configurations of equipment needed. The Administrator shall not interfere with, or attempt to control in any way, the use made of automatic data processing equipment or components thereof by any agency. The Administrator shall provide adequate notice to all agencies and other users concerned with respect to each proposed determination specifically affecting them or the automatic data processing equipment or components used by them. In the absence of mutual agreement between the Administrator and the agency or user concerned, such proposed determinations shall be subject to review and decision by the Bureau of the Budget unless the President otherwise directs.

ADDITIONAL VIEWS

Apparently there has been no specific request from the President for this legislation but it is our understanding that he has expressed no objection to it.

However, there is no question that there is a need for the legislation. In a series of about 100 audit reports since 1959 the General Accounting Office has pointed to the great waste resulting from the present management of automatic data processing in Government. Three years of active investigation by this committee have persuaded us of the necessity for adoption of a coordinated program for the management of these resources. That there is such a need is a sad commentary on the ability of the administration to cope with the problem. The coordinated administration of automatic data processing in Government could surely have been handled by Executive order.

Be that as it may, the undersigned are in accord with the overall objectives of the legislation. Annual expenditures by the Government for automatic data processing now exceed $3 billion and are expected to continue to increase for the foreseeable future. Whether or not the committee should have adopted amendments which eliminate from the application of the bill those contractors who perform services on behalf of the Government is another matter. Specifically those amendments are the following:

On page 2, line 1, delete the following: ", or at the expense of,".

On page 5, line 22, delete the following: "and other users".

On page 6, line 1, delete the following: "or user".

These amendments were based on the representations of the aerospace industry favoring the limitation accomplished by these amendments. Sixty-one companies comprising almost 100 percent of the aerospace industry, speaking through their trade organization the Aerospace Industries Association of America, Inc., adopted a resolution by unanimous vote of their board of directors dated April 16, 1965, recommending that the legislation be amended to exclude contractor equipment from its purview. This resolution expressed the position of such companies as North American Aviation, Lockheed Aircraft, General Dynamics, General Precision, Westinghouse Electric, Douglas Aircraft, Boeing, General Motors, Avco, Thiokol Chemical, Hercules Powder, Sperry-Rand, and about 45 others. This resolution was forwarded to the committee with an accompanying letter dated April 16, 1965.

In addition to the aerospace industry, the Electronic Industries Association, composed of over 300 of the leading electronic firms of this country, including IBM, RCA, Litton Industries, Western Electric, and others, also went on record in opposition to the present bill unless amended in the manner indicated.

The industries' persuasive arguments were presented in the full committee meeting and the amendments were adopted. We found

these arguments too plausible to be completely ignored and we voted for the amendments. However, our vote was less an endorsement of any industry position than it was a vote to postpone the inclusion of private contractors under such legislation until the points of difference can be resolved or until their views are more thoroughly examined in the appropriate forum—committee hearings. We contend that when a major step such as this is taken and where it directly affects a given industry, it should be taken only after full discussion of the industry's viewpoint. We are at a loss to understand why, if this legislation means as much to the industries and to the contractors as they say, they did not come in and testify.

As reported, a billion dollars worth of equipment paid for with tax funds is outside the scope of this bill and the potential savings to the taxpayer have been reduced accordingly. The bill in its present form now applies only to Government agencies and to the extent it does so, we favor it. However, we urge immediate study of the industries' viewpoint and the inclusion of contractors under the legislation to whatever degree may be indicated. It is our hope that such a determination can be made prior to consideration of this bill by the House so that the economies to be effected will not be unduly delayed.

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FLORENCE P. DWYER.
ROBERT P. GRIFFIN.
DELBERT L. LATTA.
DONALD RUMSFELD.
WILLIAM L. DICKINSON.
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